

IBM's Smarter Cities Challenge

Durham

Report





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1. Executive summary

Introduction

Durham, North Carolina, is one of 33 cities selected around the world to receive a Smarter Cities® Challenge grant from IBM in 2012, as part of IBM's citizenship efforts to build a Smarter Planet™. During three weeks in February and March 2012, a team of six IBM experts worked to deliver recommendations on a key challenge identified by Durham Mayor William "Bill" Bell and his senior leadership team: develop a well-coordinated strategy and roadmap to address youth between the ages of 14–25 who have become disconnected from school or employment pathways, and position them to become positively contributing members of the community by the age of 25. The challenge was also to enhance understanding and reach consensus for how to collectively and comprehensively address the issue of disconnected youth and fragmented services across the public, private and nonprofit sectors.

The challenge

Durham is a vibrant community located in the Piedmont area, centrally located in North Carolina. It is one of three principal parts of the larger Research Triangle area, which includes Raleigh to the east and Chapel Hill to the west.

The population demographics across Durham City and County are diverse, with a large and established African-American population (38%), and a new and rapidly growing Latino population (13.5%). Embracing its diversity, Durham is widely recognized as a highly tolerant city. While this is a positive time of growth for the Durham community overall, significant challenges persist across the area.

One issue of particular focus for Durham is the disparity of educational achievement and economic opportunity for its youth. There is wide economic variation across the city's neighborhoods, resulting in higher concentrations of poverty in some districts, and this is a key factor contributing to as many as 500 youths and young adults slipping out of the Durham Public Schools (DPS) system each year, heading towards a lifetime of disconnection from opportunities for economic independence and success. Further, this disconnection can often result in instances of criminal and other non-productive behaviors. These behaviors negatively impact lives and place a significant strain on county health and human services, local law enforcement and criminal justice systems.

While DPS has made important steps in improving overall student achievement in recent years, the number of disconnected youth persists and has been further aggravated by the US economic recession. The scale and complexity of this challenge demands concerted and collective action by Durham's public, private and non-profit sectors, higher-education institutions and work-readiness programs. To succeed, the community needs a robust and integrated partnership to provide a well-coordinated support network to strengthen the academic, social and employment skills of disconnected young people.

Overall themes

Given the complex nature of the issue of youth disconnection, and the many factors that must be taken into consideration, a Youth Disconnection Framework will help to provide structure and a more coordinated approach to understanding and addressing this challenge. IBM uncovered a variety of challenges and made recommendations related to youth disconnection, which are grouped under seven themes:

Culture: The City of Durham has strong cultural attributes and momentum, but some current community mindsets and behaviors are hampering its ability to successfully address youth disconnection. Individually and combined, the recommendations in this report comprise a holistic, transformational change program to increase alignment, collaboration and outcomes.

Vision: Major stakeholders across Durham agree that youth disconnection is a critical and high-priority issue; however, successful progress requires that Durham establish a common vision and focus, and a collective community ambition. A vision will provide guidance for day-to-day challenges and setbacks across diverse groups and enable all participants to see that their efforts matter. A vision must provide a clear and compelling picture for action and a description of what success will look like.

Leadership and governance: Translating the vision into action requires an overarching and unambiguous Governance Model that will drive all stakeholders towards a common set of outcomes and hold them accountable. It starts with identifying the right leadership, who have authority and community respect, and can bring the voice of the youth to the table, acting as a catalyst to unite stakeholders. At the heart of the recommended Governance Model is the Youth Opportunity Corps (YOC), supported by an Executive Council and Youth Council.

Youth journey: Durham lacks an approach to systemically address youth disconnection. While the definition of youth disconnection is often targeted at ages 14-25, the youth's journey begins much earlier, at birth. Disconnection occurs across a continuum, which means there are multiple factors that may impact a youth. Multiple services are available to address youth needs at different points of their development, but the landscape of service providers in Durham is fragmented and unclear. Coordination of youth services is a challenge faced by most cities, but Durham has a very real opportunity to take the lead in designing and implementing a fully coordinated youth-centric Service Delivery Model (SDM).

Youth Services Care System: To effectively support a comprehensive SDM, the City must design and implement an integrated Youth Services Care System (YSCS), including an integrated case management system, readily accessible through a portal with strong access and security controls. The YSCS portal should contain links to generic and individual care plan information, Early Warning System indicators to determine appropriate preventive and recovery actions, documentation on interventions, a Dynamic Service Provider Catalog, and workflow to manage referrals and handoffs.

Insights to outcomes: Durham and its numerous service providers have a myriad of data and information-tracking systems with little to no data or information exchange, either informally or formally. The community's ability to collectively address youth disconnection can be dramatically improved through a common taxonomy, data standards, an integrated data repository, predictive analytics, and a timely performance measurement system, enabled by technology.

Roadmap and action plan: An integrated roadmap, along with a rolling three-year action plan, should be tied to Durham's overarching vision and desired outcomes for addressing youth disconnection. These will help to coordinate ongoing efforts, capitalize on scarce resources and ensure benefits realization. The roadmap should be based on four phases of actions, as laid out in this report, and must be updated, tracked and reviewed to ensure timely delivery of results.

Conclusion

Durham is grappling with a critical issue that is either a root cause of, or a direct result of, many of the challenges commonly faced by US cities today: youth disconnection directly relates to unemployment, crime, poverty, strained social services and underdeveloped neighborhoods which, in turn, negatively impact a city's ability to attract new businesses, investments and residents. More importantly, a generation of youth is losing opportunities to become fulfilled and contributing members of communities.

Most governments — local, state, county or federal — segment the problem of delivering youth services into silos, making it difficult to achieve coordinated action. Education systems (K-12), youth-services systems, juvenile justice, community colleges and economic-development entities are separated by levels of government and by individual systems. As a result, metrics are elusive, it is hard to coordinate services or budgets across the systems and levels of government, and difficult to measure results or chart a path for improvement.

Durham must gain visibility into budgets allocated to address youth disconnection, while establishing an overarching vision, clear leadership and governance, and shared accountability for fact-based results as a solid foundation for execution. This foundation will enable better targeting and timely delivery of services to youth, more efficient use of budgets, and administrative savings. Ultimately, a coordinated approach to connecting youth to opportunity will reduce school dropout rates and increase employment.

High school dropouts are an economic drain — over their working lives the average high school dropout costs taxpayers more than \$292,000 in lower tax revenues, higher cash and in-kind transfer costs, and imposed incarceration¹. Durham's annual dropout number of 450 youths represents nearly \$131.4 million in lifetime costs per "cohort" group, which could be significantly reduced with the proposed coordinated and systemic approach to addressing the challenge of youth disconnection. Today, the approximately 4,000 disconnected youth in Durham comprise nearly \$1.2 billion in lost economic value for the City.

As the City of Durham, County of Durham, public schools, and non-profit sector organizations finalize their strategies, budgets and plans through 2013, the time is right for the community to put a more concerted effort towards improving youth disconnection.

Highlights

The IBM team recommends a four-phase roadmap of concrete actions to implement critical capability, with the capacity to be scaled to meet the long-term goal of connecting youth to opportunity:

- **Envision and set the path (0 – 6 months):** Appoint champions, establish key governance structures and operating model, define vision, clarify budget needs, identify service provider landscape, and launch communications
- **Implement and scale (6 – 12 months):** Define performance metrics, implement Balfanz indicators broadly, architect data strategy and shared-service platform, apply system of care, build youth engagement strategy, design Connect Youth, Inc.
- **Monitor and sustain (12 – 24 months):** Implement integrated funding, define case management system, design youth care system, automate Service Provider Catalog, launch Connect Youth Center, and appoint CEO
- **Integrate and engage (24 – 36 months):** Connect Youth, Inc. operational, implement shared service platform, technology-enabled youth care system, predictive analytics and ongoing progress monitoring.

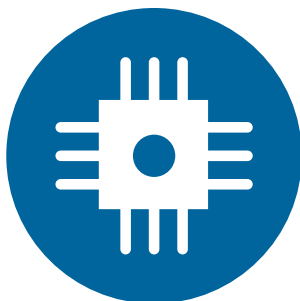
2. Introduction

IBM Chairman and CEO Sam Palmisano helped formally launch IBM's Smarter Planet with a speech before the Council on Foreign Relations in New York City in 2008. IBM has been focused on realizing this vision throughout the world over the past three years. One of the major areas of focus for this vision includes creating Smarter Cities. An urbanizing world means cities are gaining greater control over their development, economically and politically. Cities are also being empowered technologically, as the core systems on which they are based become instrumented and interconnected, enabling new levels of intelligence. In parallel, cities face a range of challenges and threats to their sustainability — across their business and people systems, and core infrastructures such as transport, water, energy and communication — that they need to address holistically. To seize opportunities and build sustainable prosperity, cities need to become “smarter.”

A. The Smarter Cities Challenge

By 2050, cities will be home to more than two thirds of the world's population. They already wield more economic power and have access to more advanced technological capabilities than ever before. Simultaneously, cities are struggling with a wide range of challenges and threats to sustainability in their core support and governance systems, including transport, water, energy, communications, healthcare and social services.

Meanwhile, trillions of digital devices, connected through the Internet, are producing a vast ocean of data. All of this information — from the flow of markets to the pulse of societies — can be turned into knowledge because we now have the computational power and advanced analytics to make sense of it. With this knowledge, cities could reduce costs, cut waste, and improve efficiency, productivity and quality of life for their citizens. In the face of economic crisis and increased demand for services, ample opportunities still exist for the development of innovative solutions.



Instrumented

We can measure, sense and see the condition of practically everything.



Interconnected

People, systems and objects can communicate and interact with each other in entirely new ways.



Intelligent

We can analyze and derive insight from large and diverse sources of information, to predict and respond better to change.

Figure 1
Intelligence is being infused into the way the world works

In November 2008, IBM initiated a discussion on how the planet is becoming “smarter” — that intelligence is becoming infused into the systems and processes that make the world work, into things no one would recognize as computers: cars, appliances, roadways, power grids, clothes, even natural systems such as agriculture and waterways. By creating more instrumented, interconnected and intelligent systems, citizens and policymakers can harvest new trends and insights from data, providing the basis for more informed decisions.

A Smarter City uses technology to transform its core systems and optimize finite resources. Since cities grapple on a daily basis with the interaction of water, transportation, energy, public safety and many other systems, IBM is committed to a vision of Smarter Cities as a vital component of building a Smarter Planet. At the highest levels of maturity, a Smarter City is a knowledge-based system that provides real-time insights to stakeholders, and enables decision-makers to manage the city's subsystems proactively. Effective information management is at the heart of this capability, and integration and analytics are the key enablers.

As IBM aligns its citizenship efforts with the goal of building a Smarter Planet, we realize that city leaders around the world face increasing economic and societal pressures. With this in mind, IBM Corporate Citizenship has launched the Smarter Cities Challenge to help 100 cities around the world, over a three-year period, become smarter through grants of IBM talent. The City of Durham was selected through a competitive process as one of approximately 33 cities to be awarded a Smarter Cities Challenge grant in 2012.

During a three-week period in February and March of 2012, a team of six IBM experts worked in the City of Durham to deliver recommendations around key issues for Tom Bonfield, the Durham City Manager, and other key Community Leaders.

B. The challenge

Durham is a vibrant community located in the Piedmont area, centrally located in North Carolina. Durham County covers 299 square miles, making it one of the smallest of the North Carolina counties. The City of Durham, covering 95 square miles, is the central urban community in the County. Durham County has a population² of 267,587 and the City of Durham's population numbers 228,330. Durham is one of three principal parts of the larger Research Triangle area, which also includes Raleigh to the east and Chapel Hill to the west.

Durham has a long history with manufacturing, textiles and agriculture, principally tobacco, as an early economic base. As with many other cities in the United States, the city has seen radical changes with this infrastructure over the past 50 years, resulting in a significant decline in the downtown and other areas. Significant growth and redevelopment efforts started in earnest in the late 1980s and continue today. Durham, like its other peer cities in the Triangle area, is also strongly focused on higher education and is the home of both Duke University and North Carolina Central University.

The population demographics across Durham City and County are diverse, with a large and established African-American population (38%), and a new and rapidly growing Latino population (13.5%). Embracing its diversity, Durham is widely recognized as a highly tolerant city. While this is a positive time of growth for the Durham community overall, significant challenges persist across the area.

One issue of particular focus for Durham is the disparity of educational achievement and economic opportunity for its youth. There is wide economic variation across the city's neighborhoods, resulting in higher concentrations of poverty in some districts. This serves to increase the multiple and cumulative impact for youth to become disconnected from schools and the workforce.

The focus of this Smarter Cities Challenge project is providing recommendations for ensuring that youths between the ages of 14-25, have an opportunity to succeed and are positioned to be positively contributing members of the community by the age of 25. In August 2008, a report entitled *Disconnected Youth in the Research Triangle Region: An Ominous Problem Hidden in Plain Sight* — A Report to the North Carolina GlaxoSmithKline Foundation produced by MDC, Inc., galvanized community stakeholders from all corners of Durham. After reviewing the report, Durham's civic leaders committed to taking action on a situation requiring urgent attention: the fact that as many as 500 youths and young adults slip out of the Durham Public Schools (DPS) system each year, heading towards a lifetime of disconnection from opportunities for economic independence and success. Further, this disconnection can often result in instances of criminal and other non-productive behaviors. These behaviors negatively impact lives and place a significant strain on county health and human services, local law enforcement and criminal justice systems.

The economic and social costs of low educational attainment and disconnection are very high for Durham with its reputation as a prosperous center of innovation, technology and learning, and as an appealing place to live. The costs for young people are equally high, impacting their life chances as productive members of a skilled workforce and as active participants in their communities. While DPS has made important progress in improving overall student achievement in recent years, the number of disconnected youth persists and has been further aggravated by the US economic recession. It is a community imperative to connect the young people of Durham with the opportunities for economic security and well-being that come from participating in the local workforce.

DPS cannot tackle this problem alone. The scale and complexity demand concerted and collective action by Durham's public, private and non-profit sectors, and the same is true of higher-education institutions and work-readiness programs. To succeed, the community needs a robust and integrated partnership to provide a well-coordinated support network to strengthen the academic, social and employment skills of disconnected young people.

Upon completion of the Smarter Cities Challenge opportunity, Durham hopes to continue to work with IBM to promote integration of recommendations throughout the community, monitor anticipated outcomes, and realign objectives and assumptions as results and new information are obtained.

C. Case for change

In *Pathways to Prosperity: Preparing Young Americans for the 21st Century*, the Harvard Graduate School of Education notes that, “In an era in which education has never been more important to economic success, the US has fallen behind many other nations in educational attainment and achievement. Within the US economy there is growing evidence of a ‘skills gap’ in which many young adults lack the skills and work ethic needed for many jobs which pay a middle class wage... the percentage of teens and young adults who have jobs is now at the lowest level since World War II.”

Moreover, between 1973 and 2007, the jobs that require at least some college education have dramatically increased, while opportunities for those with just a high school education have shrunk dramatically.

Over the past three decades, all of the net job growth in the United States has been generated by positions that require at least some post-secondary education. The lifetime earnings gap between those with a high school education and those with a college degree is now estimated to be nearly \$1 million. In 2008, the median earnings of workers with bachelor's degrees were \$55,700, while those of high school graduates were \$33,800. Workers with associate's degrees earned \$42,000, while those who had not completed high school earned the least, \$24,300³. In 21st-century America, it is evident that education beyond high school is a strong contributor to success.

When young adults do not complete a post-secondary degree or credential, it is increasingly difficult for them to find pathways to the labor market. Overall, teens have been especially impacted by unemployment. The percentage of teens ages 16-19 who were employed dropped to 28.6% in 2010. The statistics are worse for low-income minority teens — just 9% of low-income African-American teens are employed, as are just 15% of low-income Hispanic teens.

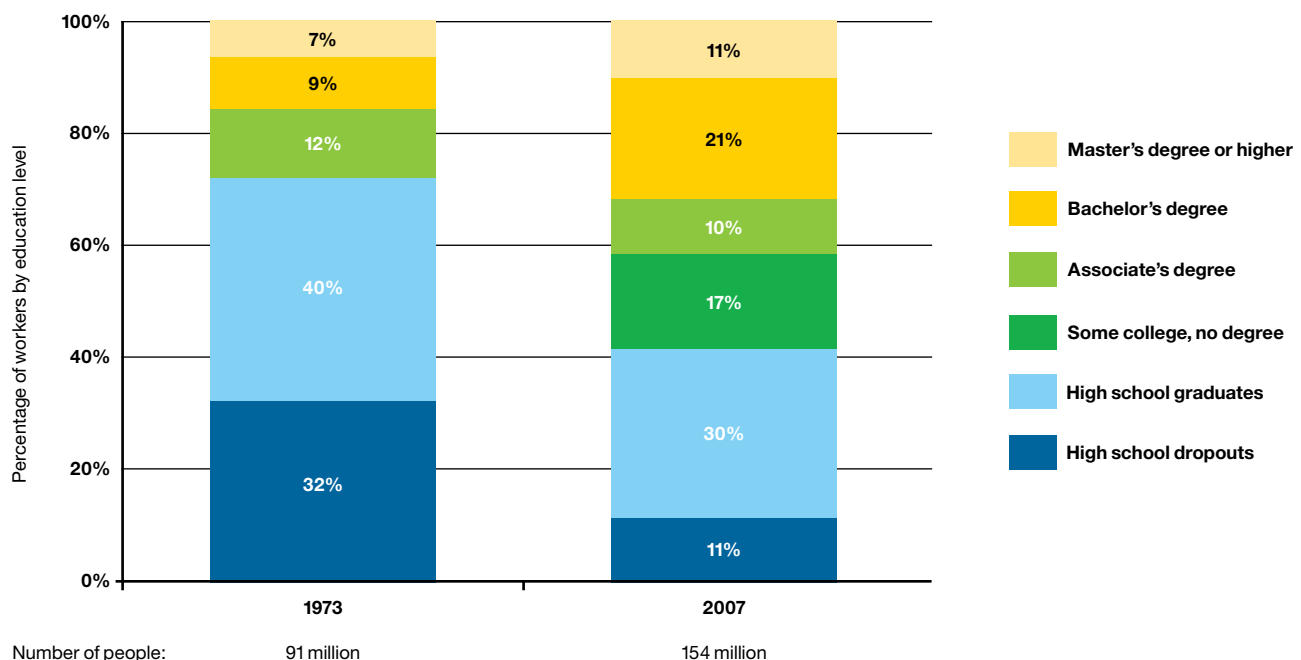
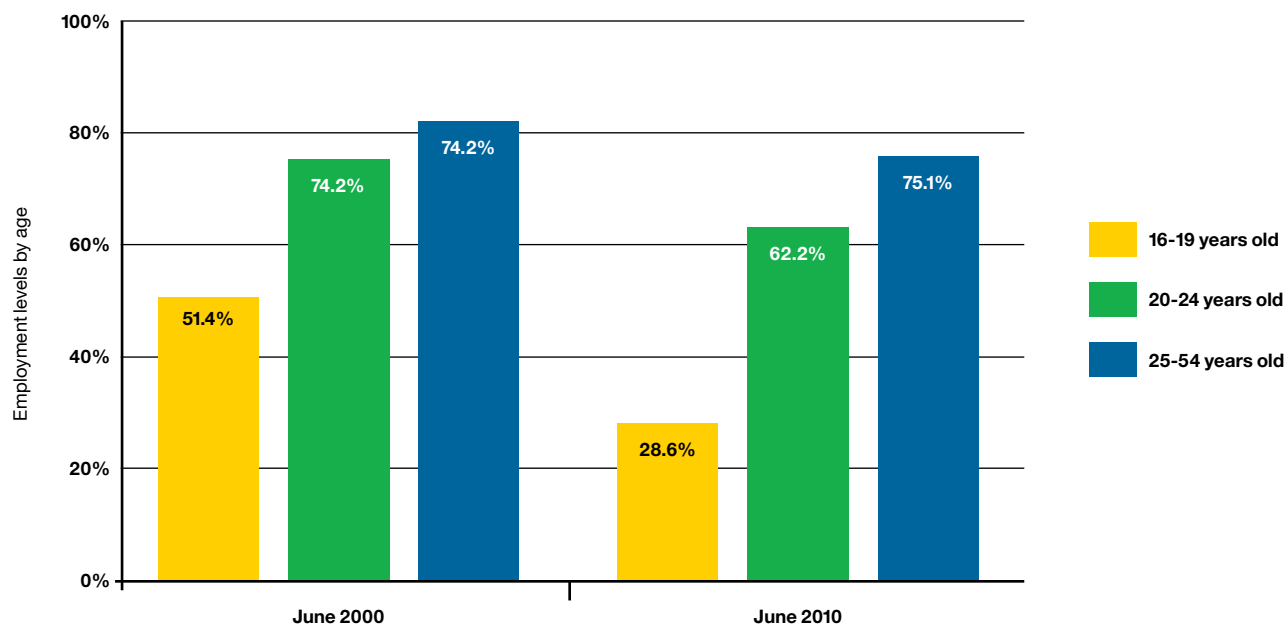


Figure 2

Since 1973, jobs that require at least some college have exploded, while opportunities for those with just a high school education have shrunk dramatically

Source: March Current Population Survey data, various years, Center on Education and the Workforce

**Figure 3**

Striking employment opportunities – Teens and Young Adults have been hit hardest by the Great Recession.

Source: Center for Labor Market Studies; U.S. Bureau of Labor Statistics, “CPS Labor Force Statistics”

What does this look like in Durham? In his tenth annual State of the City Address, Mayor Bell stated, “we as a community are challenged by the fact that, according to the 2010 US Census data, unemployment of African-Americans is above 20% as compared to unemployment for whites and Asians at only 5%. For people with less than a high school diploma the unemployment rate was over 20%. If we are to continue to be the city where great things happen, we have got to find a way to reduce the high unemployment rate in general, and specifically among African-Americans who make up almost half of the population of our community.” That statistic represents more than 9,000 members of Durham’s African-American labor force who are out of a job. Mayor Bell pointed out unemployment rates decline with formal education — for those with four-year college degrees it is 4.6%, whereas for those without high school diplomas or GEDs it is 22.5%⁴.

Data also reveals risk factors that negatively impact the likelihood of high school graduation rates among future cohorts of students in Durham. In 2009, 83.6% of white students in grades three to eight met state testing standards, compared to 45.3% of African-American students. In reading, 89% of white students met testing standards, compared to 59% of African-American students⁵.

If not addressed, this dire state of affairs has negative ramifications for youth and for the City. High school dropouts are an economic drain on US society — over their working lives, the net negative fiscal contribution of the average high school dropout versus high school graduates is \$292,000⁶. If approximately 450 youths in Durham drop out of school each year, the total value lost to Durham’s economy could be up to \$131.4 million per each cohort year of dropouts. Today’s approximately 4,000 disconnected youth in Durham comprise nearly \$1.2 billion in lost economic value to the community.

3. Findings, context and roadmap

A. Youth Disconnection Framework

A framework to address youth disconnection

Given the complex nature of youth disconnection and the many factors that must be taken into consideration to develop a more coordinated approach to this issue, a framework will help to provide structure to understand and address this challenge.

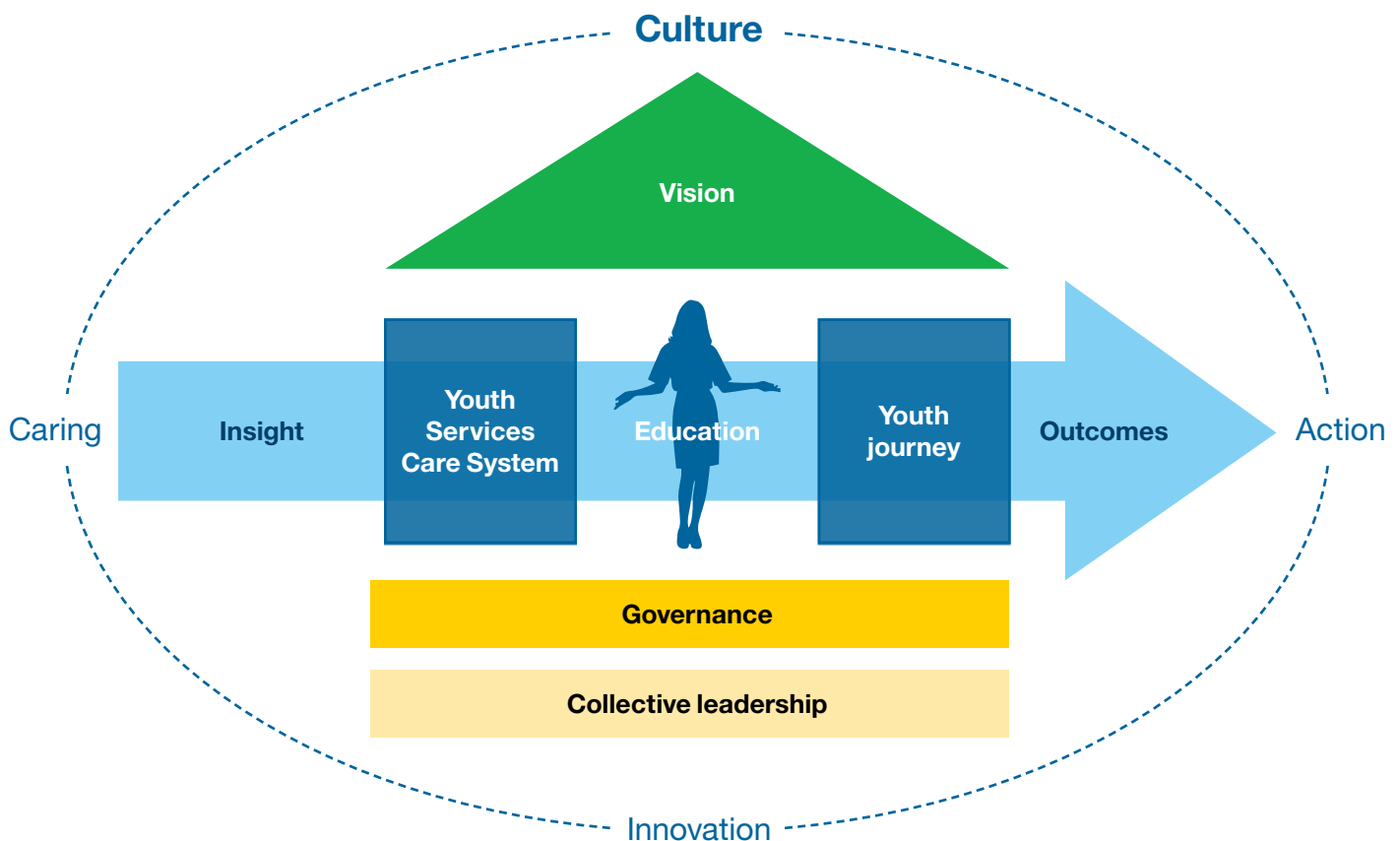


Figure 4
Youth Disconnection Framework

The components of a Youth Disconnection Framework include:

- **Culture** — signifying the underlying mindsets, beliefs, norms and visible behaviors of the community which impact its approach towards youth disconnection.
- **Vision** — standing for the overarching vision for the future state, including a compelling description of desired outcomes and goals, what success looks like and how it will be measured.
- **Youth journey** — encompassing a holistic view of a youth's journey from early childhood to post-secondary education, work and career, including the possible pathways on or off this journey, as well as the Service Delivery Model (support, service providers and programs) available along the way.
- **Youth Services Care System** — including an integrated Youth Services Care System centered on each individual youth's journey and meeting his or her evolving needs.
- **Collective leadership** — defining the accountable leaders who must collectively champion, own and drive efforts to connect youth to education, work and career opportunities.
- **Governance** — describing the overarching governance bodies, representative councils, units and their respective roles in program design and achievement of results.
- **Insights and outcomes** — articulating an end-to-end, fact-based approach which applies common data, measures and predictive analytics to track progress, gain insights and achieve results.

Education and a youth are depicted at the heart of this model to emphasize that all the elements of a Youth Disconnection Framework must come together to address a youth's needs as he or she progresses through their educational journey toward becoming fulfilled and engaged scholars, members of the workforce and contributing citizens.

B. Culture

The City of Durham has strong cultural attributes and momentum, but some current community mindsets and behaviors are hampering its ability to successfully address youth disconnection.

1. Cultural strengths

Durham is clearly experiencing a renaissance, is in the midst of visible economic and social change, and has strong, positive momentum. There is tremendous social capital and pervasively expressed willingness to change among the wide community of leaders, agencies and organizations who collectively recognize that the issue of youth disconnection is a priority challenge which must be addressed. This is evidenced by the fact that the term “disconnected youth” is now widely used and a common part of the city's discourse.

The city's cultural strengths are powerful assets which serve as a foundation for change. In many critical ways, the community's core values and beliefs are already aligned with its commitment to improve opportunities for all youth in Durham.

Diversity is a hallmark of Durham. Newsweek magazine's online division, The Daily Beast, recently named Durham the “The Most Tolerant City” in America, rated first of all cities with a population greater than 250,000. This recognizes Durham as an urban center which is “a haven for tolerance,” where there is a diverse urban population “matched by high levels of acceptance and peaceful relations.”

An orientation to research and knowledge underlies many of the discussions and approaches toward the issue of youth disconnection. Because Durham is the home of Duke University and North Carolina Central University, as well as being one of the vertices of the Research Triangle area and home of the Research Triangle Park, many of the local experts working on youth disconnection are solidly grounded in, or even leading, relevant research efforts and best practices.

An innovative spirit and entrepreneurial mindset also pervade Durham's approach to problem-solving. A willingness to change, coupled with the community's inventive attitude and interest in emerging best practices, results in a continuous stream of new ideas and pilots.

Pride in Durham is especially evident in the midst of ongoing transformational social and economic changes. The community values its heritage as the center of "Black Wall Street," as well as its growing role as a major location for higher education and research in America.

2. Cultural challenges

Our discussions with many stakeholders in city, county, education and non-profit roles across the Durham community revealed consensus around the cultural attributes that are blocking its ability to effectively address youth disconnection. The following phrases were used by a number of stakeholders to describe cultural challenges:

"Serial pilots, which are rarely sustained" have resulted from the community's "pursuit of the research fad-of-the-moment" and the value placed upon innovation and entrepreneurship. Durham's landscape contains more than 2,000 service organizations, of which more than 400 are estimated to be working on the issue of youth disconnection, yet many of these programs and pilots have not been assessed for results or scaled.

"Lots of smart people who want to 'do it my way'" coupled with the community's orientation towards "inclusiveness to the point of dysfunction and inaction," have led to large committees, councils and task force meetings which frequently struggle to reach agreement. As a result, despite the community's strong desire to change, its ability to collaborate effectively and make timely decisions to drive results is hindered.

"Little brother syndrome" is a phrase used by several stakeholders who characterized Durham as a city with a self-perception as being the smallest member of the North Carolina regional triangle comprised of Raleigh, Chapel Hill and Durham. This perspective is reflected in conversations about how Durham measures up to the other cities, as opposed to the many ways that Durham is leading the way.

The nature of communications are another manifestation of culture. Perhaps because the city has such a strong orientation to improvement, several community members reported that there currently is "less discussion of what is positive." This emphasis colors citizens' perceptions of disconnected youth and the school system, and overshadows recognition of the many positive changes underway.

Many of these challenges have roots in Durham's cultural strengths, but can be enhanced through a thoughtful transformational change program.

C. Vision

A vision is a catalyst and the lifeblood of any complex task or organization. It provides a framework for day-to-day challenges and setbacks across diverse groups, and enables all participants to see that their efforts matter. Vision statements can be short, or as long as a page or two, but must provide a clear and compelling picture for action.

1. Findings

As with many communities around the world, in Durham there is a wide range of public, private and non-profit initiatives targeting disconnected youth that are well-intentioned, but these many parallel efforts don't align well to a common view of objectives. This results in duplication of efforts and expense. A common vision will show how diverse parts of the youth support continuum can align in pursuit of community goals. Driving toward a consensus vision for youth success across the community will be an essential first step towards meaningful progress.

The pathway to success with Durham's disconnected youth must begin with a clearly defined and accepted common vision of success — what the Durham community wishes to achieve with its youth. Since the 2008 MDC report on disconnected youth, the community has been talking about objectives: what should a thriving, ambitious and resourceful region like the Triangle offer its youth, and what should be the animating vision for all young people? Clearly, the concepts associated with youth disconnection have entered the lexicon, and are now an ongoing part of strategies, plans and discussions. A common vision will show how diverse parts of the youth support continuum can align with community goals.

2. Recommendations

While a common vision is critical for the Durham community, the process employed to create this vision can provide significant additional value. A vision collaboration meeting or meetings with all of the key stakeholders, where creative thinking is clearly encouraged, can certainly lead to broad and useful discussions about bold goals and outcomes for disconnected youth. The important element will be to drive all participants to a common view of sufficient breadth and depth — a vision that will encompass, enable and unite future actions.

It is often useful to employ an external facilitator in implementing such a wide-ranging initiative across the diverse public, private and non-profit communities. Seeking best-practice experience from other cities and pursuing support from independent groups have been proven approaches to achieving these challenges. An example of the latter would be the Forum for Youth Investment in Washington D.C., which leads the Ready by 21[®] National Partnership (more information about the Forum for Youth Investment is provided in Appendix D).

Following creation of a compelling common vision for youth, a second critical step will be to positively and effectively define a collective ambition across the Durham community. There exists an overwhelming agreement that disconnected youth is a critical and high-priority issue. Knowing this, however, is only the first step, and must be followed by agreement to a collective ambition. Specifically, this would answer the questions of whether the community is willing to invest, and take the bold steps needed immediately to substantially improve success with disconnected youth.

D. Leadership and governance

The challenge of addressing youth disconnection exists throughout the US and other countries around the world. In most communities, efforts to address this issue are fragmented, uncoordinated and distributed across multiple levels of government (local, state and federal). As a result, it is challenging to coordinate budgets and services, measure results, or chart a clear path for improvement across the entire system. Successfully addressing youth disconnection requires the full spectrum of stakeholders — government, community and business — to come to together with a collective ambition and focus on connecting youth along their journey, ultimately transforming them into productive members of the economy and society. Durham, as a community and county, is no different — no single level of government, service provider, business or philanthropic organization can solve this problem independently. Durham has an opportunity to become an innovative leader in addressing youth disconnection if it successfully builds on a community-wide vision by implementing integrated leadership, governance and funding models.

1. Findings

In Durham, there are a wide range of initiatives under way to address youth disconnection. The County, City and Durham Public Schools (DPS) have recently developed strategic plans with a set of goals and priorities, but there are a number of factors hindering directed action and progress.

Leadership is recognized as the driving force to get coordinated action. While a number of organizations, agencies and service providers are engaged in programs to address youth disconnection, the community as a whole lacks collective leadership and accountability on this issue. While stakeholders are willing to join coordinated action, a lack of program-level leadership exists with no single leader driving the change and holding people to account.

Governance is considered the “velcro between the pieces that must come together.” There was very little evidence, however, that an overarching framework and governance model exists to address youth disconnection. While the City, County and DPS have strategic plans, none explicitly call out addressing youth disconnection as a priority. Further, service providers have their own missions and governance structures, but there is no overarching governance structure to direct and align their efforts or to measure the quality of their service and performance in achieving outcomes to better connect or create opportunity for youth.

“This will take more direct and focused leadership; there is no ‘velcro’ between the pieces that must come together.”

Budget and funding are often the obstacle to coordinated and sustained action in addressing the many social challenges faced by cities around the world. For Durham, the issue appears to be less about the size of the purse and more about understanding how much is being spent and how funds have been dispersed, which is currently not tracked in a coordinated way. Gaining visibility of the total funding spent on addressing youth disconnection across the ecosystem should be a priority and will help coordinate and target delivery of services more effectively to reduce drop out rates and increase employment. Durham is in a fortunate position of being able to attract funding and access money at low interest rates due to its strong economic and credit rating positions with all three rating agencies. The County has maintained its AAA bond rating, putting Durham in the top one percent of counties in the US. The City is also AAA bond rated — an achievement attained by only 38 of the nation’s more than 22,500 cities.

With the right leadership, governance and a coordinated approach to funding, Durham is positioned to lead the way in addressing youth disconnection.

2. Recommendations

Translating into action the City's vision on addressing youth disconnection requires achieving collective ambition, focus, and an overarching and unambiguous governance model. It starts with identifying the right leadership — people who have authority, the respect of the community, and can bring the voice of the youth to the table acting as a catalyst to unite stakeholders. Governance structures are required to sustain a program that drives all stakeholders toward a common set of outcomes to which they would be held accountable.

Leadership

Successful initiatives, even in highly collaborative environments, require strong champions and focused leaders, undistracted by competing priorities, who will place the initiative's success above all other considerations. The Durham community needs to identify the human catalysts who will unite the community and drive bold actions to deliver impact and sustained outcomes in addressing youth disconnection. These leaders will be specifically responsible for the development of the common vision and articulating a collective ambition to address youth disconnection.

“Our chief want is someone who will inspire us to be what we know we could be.”

— Ralph Waldo Emerson

An Executive Leader is required with authority, influence and access to resources in order to translate the momentum on addressing youth disconnection into action and realizable outcomes. This Smarter Cities Challenge project has a powerful sponsor in Mayor Bill Bell. He has a track record of tackling hard issues, based on what he feels is right and on his conviction to drive change. Having Mayor Bell as the Executive Leader to initially drive the charge and bring together the full spectrum of stakeholders would make this task achievable and directed toward improving the lives of young people in Durham. Success would have a broad-reaching impact on the Durham community and would deliver downstream benefits in addressing crime, supporting health and wellbeing aspirations and reducing the burden on the social benefit system, among others.

We also recommended that a Commissioner for Youth Opportunity be appointed. This should be a joint appointment by the County, City and DPS. The Commissioner for Youth Opportunity should be a role model for youth and ensure the voice of youth permeates the thinking and framing of the collective ambition to address youth disconnection. The commissioner should be a youth or an individual that understands youth and how they connect. This is not a peripheral role — it is at the front and center of leading the planning, program design and coordination of the implementation effort. The Commissioner for Youth Opportunity should be a full-time, paid role to allow the individual to dedicate their efforts to solving the issue.

Together, these two champions work in concert and inject the passion, influence, experience, understanding and authority to achieve a concerted program of action that will ensure quality outcomes that make a difference to the lives of youth and make them productive, contributing members of the community, economy and society. This model of joint leadership has been successfully used to develop a Child and Youth Master Plan for Nashville and Davidson County⁷ where Mayor Karl Dean and Jairus Cater co-chaired the Task Force in the creation of the master plan.

Governance

Good governance is the foundation in achieving success in any initiative, particularly in complex ecosystems that stretch across multiple organizations, agencies and service providers where individual stakeholders have their own missions and agendas. Addressing youth disconnection effectively requires a governance structure that is unambiguous, providing clarity on who does what and how people will be held to account.

We recommended that the following Governance Model be adopted and implemented to both systemically address the issue of youth disconnection and to provide opportunities for youth to connect to employment. The key structures of this proposed Governance Model are contained in Figure 5.

At the heart of this Governance Model is the Youth Opportunity Corps (YOC), supported by the Executive Council and the Youth Council. It consists of two units: one full-time Operations Unit consisting of five roles, and a part-time Enabling Infrastructure Task Force that will bring the existing IT and information management resources together to create the enabling IT infrastructure. Consultation with the spectrum of stakeholders is through the issue-based Consultative Forum. To provide an alternative pathway to employment, the model includes creation of a community investment corporation (Connect Youth, Inc.). A high-level description of these structures follows in Table 1.

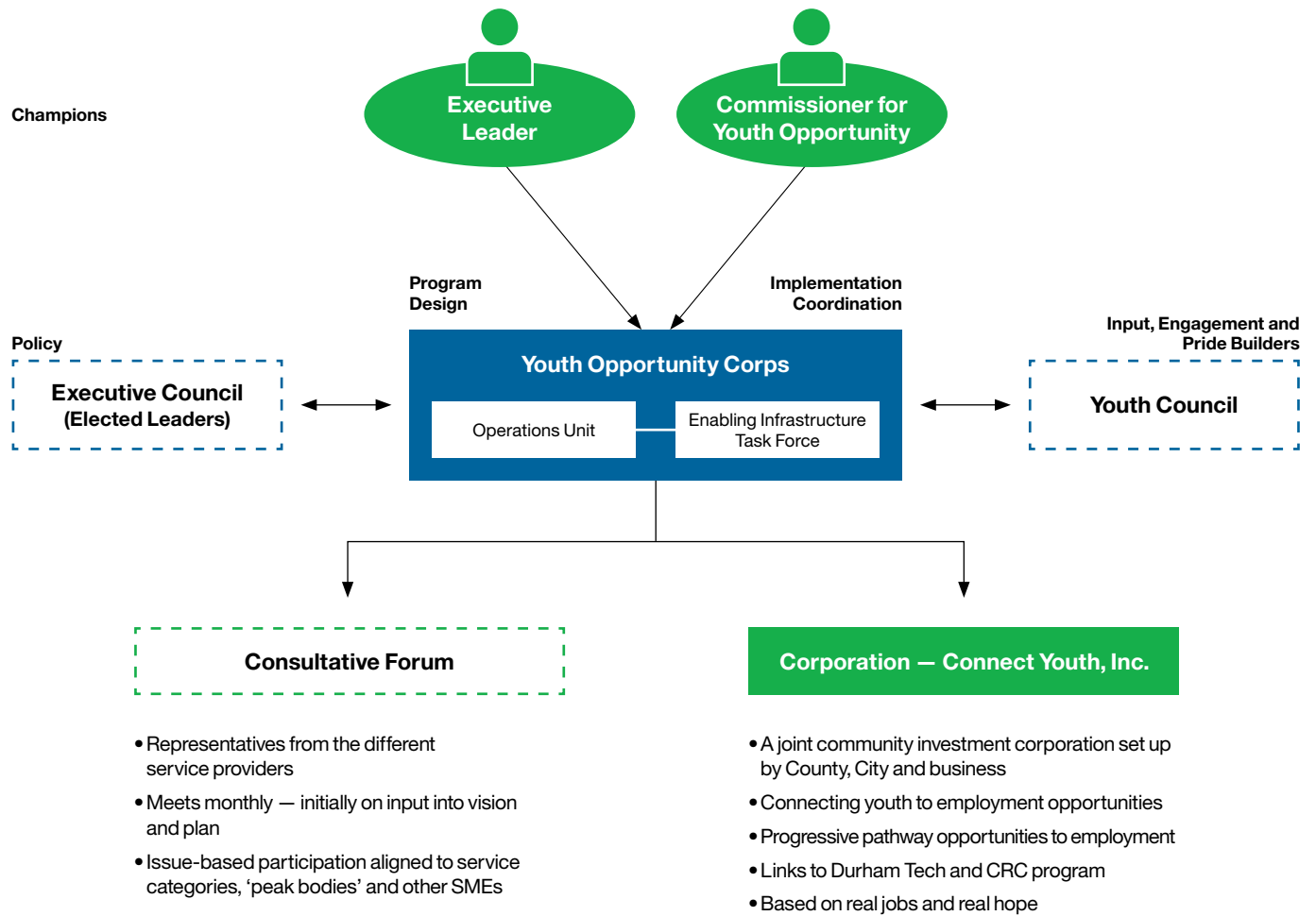


Figure 5
Governance Model to address youth disconnection

Table 1 – Description of governance structures

Youth Opportunity Corps	Focus: The Youth Opportunity Corps (YOC) is the decision-making body responsible for program design and implementation coordination. Specifically, the YOC develops the action plan, budget and funding model, service delivery model, and performance management system. It also monitors and tracks progress against the outcomes and achievement of the vision.
	Collective ownership: The County Manager, City Manager, and DPS Superintendent have joint ownership of the YOC and ensure it is appropriately resourced.
	Chaired by: It is co-chaired by the Executive Leader and Commissioner for Youth Opportunity.
	Includes: It includes selected leaders from the teacher community, service providers, Chamber of Commerce and learning institutions.
	Immediate priorities: These include defining budget needs for the program (especially over the first year), gaining visibility of the budgets and funding currently focused on addressing youth disconnection and associated services. The priorities also include supporting the champions in development of the vision and articulating collective ambition.
Operations Unit	Focus: This is part of the YOC and responsible for the day-to-day operations. It will be the arms and legs of YOC and instrumental in execution of the program of work. Further, this unit sets up the Enabling Infrastructure Task Force. Specific activities in the first six months include: <ul style="list-style-type: none"> Identify budget and funding sources, and get visibility of the current funding to address youth disconnection Define budget needs for the first year of operations Identify the service provider landscape and mapping based on services, capability and capacity Design the comprehensive operating model that underpins the governance structure, with roles and responsibilities clearly defined.
	Staff: It consists of five funded positions: two from the County, two from the City and one from DPS. These positions are held by the respective organizations, but are seconded to YOC for the duration of the initiative. The staff members take direction from YOC. The specific roles are: <ul style="list-style-type: none"> Budget and Funding Management Lead Strategic Planning and Operations Lead Change Management and Community Liaison Business Processes Design and Service Delivery IT Lead (will chair the Enabling Infrastructure Task Force).
	Management: The manager for the unit is selected from one of the five positions.
Enabling Infrastructure Task Force	Focus: The Enabling Infrastructure Task Force is responsible for the underlying IT infrastructure and systems required to support the Service Delivery Model and Youth Care System, through creation of a shared service platform and addressing other IT and information management requirements. The intention is to leverage existing systems and resources where possible and direct the work on IT programs of the County, City or DPS, so that addressing youth disconnection is a priority. Specific tasks include: <ul style="list-style-type: none"> Agree on the standards and taxonomy to facilitate information exchange in the context of addressing youth disconnection Assess the IT resources, capacity, and where systems and infrastructure can be leveraged Work with the Operations Unit to determine the IT implications of the program of action Assist in the development of the shared services platform architecture and determining who (County, City, DPS, other) will lead the different parts of the architecture.
	Includes: It brings together the IT staff from County, City, DPS and other stakeholder organizations to consider how joint resources can be leveraged.
	Chaired by: The task force is led by the IT Lead from the Operations Unit.
Executive Council (Elected Leaders)	Focus: The Executive Council is responsible for any policy or legislative changes required to support the program of action.
	Joint membership: It brings together representatives from the three elected bodies (two County Commissioners, two City Council members and two School Board members).
	Mode of operations: The council supports the YOC to drive the program and implementation forward, and be an escalation point, if required.
Consultative Forum	Focus: This is a consultative body and not a decision-making forum, established to provide input and share experience on issues.
	Representation: Representatives are from different service providers based on the issue at hand. Issue-based participation is aligned to service categories, “peak bodies” and other subject-matter experts.
	Frequency: The forum meets monthly, initially to input into the vision and plan.
Corporation - Connect Youth, Inc.	Focus: The corporation focuses on connecting youth to employment opportunities by providing alternative and progressive pathways to employment — matching demand with supply and housing real businesses that provide jobs. Emphasis is placed on hard and soft skills (such as interview skills, presentation, and other work advice and support).
	Set-up: It is a joint investment corporation by the City, County and Chamber of Commerce and is set up as a Benefits Corporation (North Carolina Benefit Corporation ACT — SB26).
	Leadership: The corporation is led by a CEO and a board that includes the City Manager, County Manager and Chamber of Commerce.
	Key functions: <ol style="list-style-type: none"> Business units: employ youth and link with schools and Durham Technical Community College. These are viable businesses and may provide three levels of jobs (entry-level jobs similar to Silverline Windows, mid-level jobs and knowledge worker jobs) Shared services support business units, including the provision of a business development function working with other businesses to attract investment and interest in the services or products of the Corporation. HR unit is responsible for supply and demand, connecting youth to jobs.

The underlying operating model needs to be designed to support good governance and will include:

- Defining the management system that documents how the County, City and DPS will take joint responsibility for the Youth Opportunity Corps
- Providing further detailed definition of the functions and structures
- Defining any legislative and policy redesign requirements
- Understanding business processes and identifying opportunities for improvement, particularly in how such process can be streamlined to effectively and efficiently connect youth and support an integrated care system across the landscape
- Defining the metrics for success and key performance indicators
- Defining the information standards and an overview of the information flows and supporting architecture
- Defining the performance management system to monitor and track progress and report on achievements
- Defining a holistic approach to review good ideas that have been piloted and incubated, evaluating which can be scaled to deploy and implement more widely. There is much thought leadership on how this can be done, and a Harvard Business Review article on “Meeting the Challenge of Corporate Entrepreneurship” shows how “entrepreneurial equilibrium” can be reached.

This is a complex ecosystem with many players covering the political, administrative and executive layers of government, other services providers and stakeholders, therefore it requires a clear definition of roles and responsibilities. We recommend that across the structures and functions, a RACI framework be used to support role clarity, determining who is responsible, who is accountable, who would need to be consulted and who would need to be informed.

Further, a clear decision-making process should be defined to provide clarity on how decisions will be made. Working together with the RACI framework, the decision-making process emphasizes swift and timely decisions to drive the program of action forward.

The motivation for setting up a corporation to connect youth to jobs

The Service Delivery Model represents the comprehensive youth journey, the many pressure points that lead to disconnection, and programs for prevention, intervention and reconnection. While aspiring to attend college is noble, not all youth see this as part of their future. Many countries, over a number of years, have embraced alternative pathways for young people, providing options into the workforce that are more aligned to the interests of the individual and the needs of their economies.

Studies by the Organisation for Economic Co-operation and Development (OECD) have shown many European nations, and others, such as Australia and New Zealand, have established vocational education and training programs that allow young people to make choices, while at school, to combine learning and work experience. In many of these countries (Austria, Denmark, Finland, Germany, the Netherlands, Norway and Switzerland), after grade 9 or 10, 40–70% of young people choose programs that combine classroom and workplace learning during the next three years of their schooling⁸.

“Be a yardstick of quality. Some people aren’t used to an environment where excellence is expected.”

— Steve Jobs

The models may vary, but their success has resulted in higher graduation rates for these countries. The US has dropped from first to thirteenth in high school graduation rates over a 15-year period.

An aligned perspective to thinking about alternative pathways must consider the balance between demand and supply: focusing on demand alone creates supply challenges. While it is important to understand the requirements of business and attract the right investment, it is equally important to have people with the right skills to succeed.

Our recommendation is to create a Benefits Corporation – Connect Youth, Inc. It takes into account the formative research, analysis and results achieved by other countries and is based on an integrated supply-and-demand model. In conceptualizing this corporation, we also considered the plight of young people in Durham who were disconnected and ended up being adjudicated through the criminal justice system from 16 years old. These young people are left without pathways to the workforce either due to legal considerations or the stigma attached to having a criminal record.

Youth disconnection is not just a problem of getting youth who drop out back into school and on a pathway to college. It is also about painting a vision for those who want alternative options and choices. Connect Youth, Inc. is a pragmatic approach, applying sound business principles to provide real jobs and credentialing opportunities so that the individual can have a plan and a progressive pathway to employment.

Budget and funding

A prerequisite for setting up the overarching governance model and implementing a comprehensive program to address youth disconnection is to get visibility of the budget and funding that has been targeted at this issue and associated support services. It is also important to assess how existing resources and funding can be initially leveraged to cover funding gaps and make recommendations on how these gaps may be addressed. A key priority of the Youth Opportunity Corps is to determine and implement an appropriate integrated funding model to support a three-year rolling plan.

While the County, City and DPS budgets are in draft mode for the fiscal year 2012-2013, it is imperative to start planning and assigning budgets before June 2012 in order to support the first two phases of this program, acting on:

- Initiating a process to study and document all existing funding streams and budgets to gain full budget visibility (both discretionary and non-discretionary) and mapping all funding sources to the services and programs being currently funded
- Identifying unassigned budgets, reserved for strategic initiatives
- Merging of funding and grant pools, assigning them to the Youth Opportunity Corps to ensure funds are effectively distributed
- Defining program budget requirements for Phase 1 and Phase 2 and mapping those to available funds; potential gaps might be closed via:
 - Reallocation of a portion of other departmental budgets
 - Issuing bonds as a means of obtaining additional funding for the program
 - Federal, state or philanthropic grants supporting integrated programs.

Applying both a top-down and bottom-up process will allow for visibility of any planned and budgeted activities, and allow ongoing programs to be appropriately recorded to track their contribution to addressing youth disconnection. We propose that a special cost center be created within the current accounting systems. This cost center can be used to track funding and report on programs that address youth disconnection.

Even if the best vision, program and governance are established to address youth disconnection, a lack of visibility into budgets and funding will prevent sustained action toward achieving desired outcomes. Failure to systemically address youth needs and high school dropouts will generate a net negative \$292,000 fiscal contribution, as opposed to contributions of high school graduates. Philanthropic funding increasingly requires a coordinated program in which results can be measured. Further, funding of point solutions and approaches are also becoming less attractive.

Durham has an opportunity to approach youth disconnection in a coordinated and focused way. The momentum and willingness to address this issue is evident. Success will be driven by taking bold action through the right combination of leadership and champions, by lean but effective governance arrangements, taking innovative approaches to funding, and applying new ideas to provide alternative pathways to employment.

E. A youth's journey and services landscape

Figure 6 depicts a high-level view of the life of a youth across a continuum of events that may occur during his or her journey from early childhood, through post-secondary education, to workforce and career. The IBM Smarter Cities Challenge team interviewed approximately 60 youth, from a wide spectrum of Durham's youth population — from the high achievers of the Youth Commission, to those working on their GED at the Emily K Center, to middle school students at Lowe's Grove Middle School during an eWeek volunteer activity. We also had a chance to interview two youth during a police ride-along who are unfortunately now entangled in the criminal justice system. Reference Appendix A for additional stakeholders interviewed.

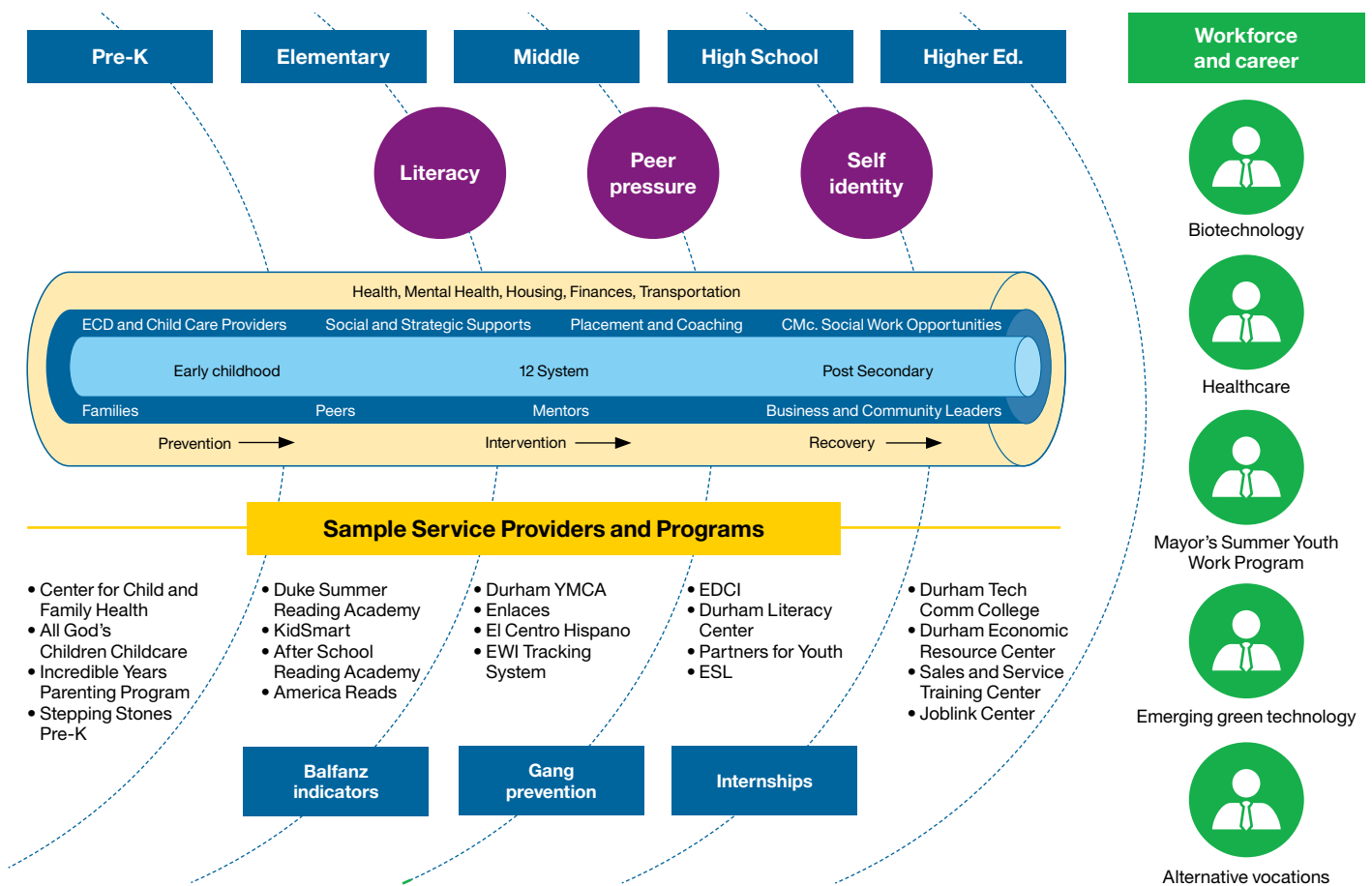


Figure 6
The Youth Service Delivery Model

1. Findings

The language of disconnection exists, but Durham is lacking an approach to systemically address youth disconnection and a youth-centric Service Delivery Model.

While the definition of youth disconnection is often targeted at ages 14–25, many studies show, and the youth interviewed confirmed, that the youth's journey begins at a much earlier age, at birth. Disconnection occurs across a continuum, which means there are multiple factors that may impact a youth. In Durham, approximately four to six thousand youths are either not in school or are unemployed. It is very difficult for a youth to be engaged at school when he or she is a single parent, has nowhere to live, or has little to eat. As a child matures, factors like hunger and poverty become cumulative over time and can greatly increase the chance of a child becoming disconnected if certain basic needs are not addressed.

The Balfanz indicators are key to identifying potential youth disconnection, however, other social, physical and environmental factors are relevant. Typically, the Balfanz indicators for elementary and middle school students are based on the following criteria:

- Math final grade of D or F
- English final grade of D or F
- Attendance below 80%
- Behavior final grade of “Unsatisfactory” in at least one class

In Durham, the Balfanz indicators are being piloted in several schools, including Chewning, Lowe's Grove and CC Spaulding, which should prove to be excellent signals. There are also Balfanz+ indicators, such as poverty, family structure, mental and physical well-being, and housing that must also be considered as part of an early warning system.

Early indicators exist at the elementary, middle school and high school levels for students with characteristics of potential dropouts. The earlier a student first sends a signal, the greater the risk that he or she will drop out of high school. Third- and fourth-graders who read at, or below, kindergarten level are sending strong signals as potential dropout candidates. Sixth-graders who fail even one of the Balfanz indicators listed sends a strong signal for potential dropout. High school students may typically send their first serious distress signal if they earned fewer than two to three credits, or attended school less than 70% of the time.

As stated in the mayor's State of the City Address on February 6, 2012, his major areas of focus are:

1. Reducing violent crime
2. Continued revitalization and improvement of neighborhoods
3. Affordable housing
4. Sustainable job development and creation

Service providers

While there are many organizations in Durham that provide excellent services to youth, the siloed approach does not allow for a holistic view of the youth. There is a limited use of integrated plans across services. There also is no easy referral system for the hand-off of cases from one organization to another.

A number of programs do not sufficiently include the voice of the youth. For example, one youth stated, “My teacher asked us to write down our homework from the blackboard. We all just stared at it. Why couldn’t the teacher just send me my homework via Facebook or tweet it to me?” Teachers may not be sufficiently assessed or trained for the challenges and requirements of today.

There is also insufficient understanding of the Latino youth disconnection, its complexities and challenges. While the El Centro Hispano organization does an excellent job in serving the needs of Latinos, it is a single organization that is not staffed with sufficient resources to support the needs of the entire Latino population. As an example, one Latino youth graduated from high school, but could not find a job or go onto higher education because he was undocumented.

Service providers may take advantage of IBM’s Safety Net, which provides a cloud-based application that allows individual non-profit organizations (NPOs) to store and manage their data. It is designed for small NPOs with limited capacity and capability. If leveraged more broadly across the ecosystem, and integrated within the shared services platform, it will allow for more electronic-data sharing. If this approach is adapted, the shared services architecture should be refined accordingly.

1. Recommendations

To address the full spectrum of needs, a comprehensive program should be developed that includes the design and implementation of a Service Delivery Model encompassing a youth’s full journey and pathways to success, including:

- Prevention, intervention and recovery
- Service access and capacity (in areas such as pre-kindergarten)
- Transitions (middle school, high school, college and work)

This program will also include implementing a sufficient number of case managers in DPS, working in partnership with teachers and other providers, to ensure a student’s total needs are met throughout their school years and as they transition. Durham’s “Becoming Durham Initiative” and “System of Care” programs are excellent examples of programs that take a holistic view, which should be scaled to all the youth population. Other functions in the Service Delivery Model should include:

- Building more teacher and community business awareness
- Allowing teachers access to the integrated view of their students data (health, scholastic and human services) and guidance to appropriate services as required, through an online teachers’ portal
- Developing alternative and flexible pathways for youth who are no longer in the K-12 school system or who choose alternative learning models
- Enhancing teacher and principal development programs to be more effective in understanding and addressing youth disconnection
- Embracing the reality of the growing Latino population in Durham and integrating their needs into the programs which address youth disconnection
- Enhancing teacher curriculum for the identification, referral and teaching of students with mental health issues
- Adapting and leveraging intervention programs, such as the recently proposed Re-engagement Center

Supply-and-demand model considerations

The Youth Service Delivery Model in Figure 6 also represents two applications of the supply and demand model. The first application defines demand (needs) from the youth's perspective, while the service providers supply or address youth requirements, whether academic or non-academic (such as housing or a family structure issue). The second application of the supply and demand model exists when the youth is ready to be employed

or enter the workforce. The model defines the youth as the skill providers (supply) to meet the job opportunities (demand) from businesses.

The supply and demand model should be incorporated in the overall structure of the Service Delivery Model to ensure adequate capacity-planning decisions and actions are taken in accordance with fact-based data.

Table 2 – Value proposition for implementing a supply and demand model where youth needs represent demand and service providers represent supply

Capability	Enables	Provides
Continual balancing of supply (service providers) and demand (needs of the youth) in short-, medium- and long-term time frames.	Proactive, instead of reactive, measures.	The ability to anticipate specific needs, such as housing requirements and single-parent needs. When suppliers are the businesses, this allows longer lead times to make cost-effective decisions to close skill gaps, and the ability to avoid, or reduce the impact of, target shortfalls.
Service provider planning at the specific "need" level using information from trusted sources, such as medical institutions, HUD and unemployment agencies.	Fact-based, service provider capacity decisions.	One version of the truth regarding future service provider requirements; justifiable basis for gap-resolution actions, such as combining or eliminating service providers no longer needed.
Visibility into issues not readily apparent solely from standard academic measurements, by using measures such as Balfanz.	Identification of service provider capacity excesses and shortages, which frequently exist at the same time.	Better information to avoid "knee-jerk" reactions to dips in performance or to avoid lack of action when performance is on target. (Example of a 'knee-jerk' reaction: providing funding to service providers to address a short-term need)

Table 3 – Value proposition for implementing a supply and demand model where business opportunities represent demand and youth skills represent supply

Capability	Enables	Provides
Continual balancing of supply (skills of the youth) and demand (business opportunities) in short-, medium- and long-term time frames.	Proactive, instead of reactive, measures to ensure youth are being trained with the right skills to meet the specific business requirements.	The ability to anticipate specific needs from businesses, NPOs and other corporations and institutions; the ability to avoid, or reduce the impact of, target shortfalls.
Business planning at the specific "need" level using information from trusted sources, such as DPS data, Durham Technical Community College, and North Carolina Central University.	Fact-based business and organizational capacity decisions.	One version of the truth regarding future service provider requirements; justifiable basis for gap-resolution actions, such as combining or eliminating service providers no longer needed.
Visibility to issues not readily apparent, through sources such as access to job opportunity databases.	Identification of youth skills that are in short supply (such as Medical Decoders Level 3) and those that may be in excess supply (such as hairstylists) which frequently exist at the same time.	Better information to avoid "knee-jerk" reactions to dips in performance or to avoid lack of action when performance is on target. (Example of a 'knee-jerk' reaction: develop a training curriculum for Medical Decoders Level 1 when not needed)

F. Youth Services Care System (YSCS)

Durham has an abundance of service providers with innovative and entrepreneurial spirit, operating without a youth-centric Service Delivery Model (SDM). There is a fragmentation of service providers and no clear picture of the service provider landscape — who they are, what they are doing, what youth segment is being served, and what capacity they have. The non-profit organization Bull City Forward has started to build a map of service providers, which represents a good base for the effort.

To effectively support a comprehensive SDM, it is critical to design and implement an integrated Youth Services Care System (YSCS) including a youth-centric integrated case management system, readily accessible by an online portal offering restricted and secure youth-centric views on a need-to-know basis. The YSCS will:

- Store individual historical data and individual care-plan information

- Link to Early Warning System indicators for determining appropriate preventive and recovery actions to address the area of risk of each individual (Durham Public Schools are already piloting Balfanz in four schools and are working on enhancing the indicators to Balfanz+)
- Document preventive interventions, actions and care-plan outcomes
- Link to a Dynamic Service Provider Catalog, enabling system-supported mapping to the best available service to support the issue
- Offer workflow capability to manage referrals, handoffs and feedback loops

The YSCS would also store general information, such as service maps or reports and adhere to the highest security standards. In the social services context, organizations such as the UK Department of Work and Pensions and US-based healthcare service providers are using similar systems with a need-based access governed by security, access controls and audit trails.

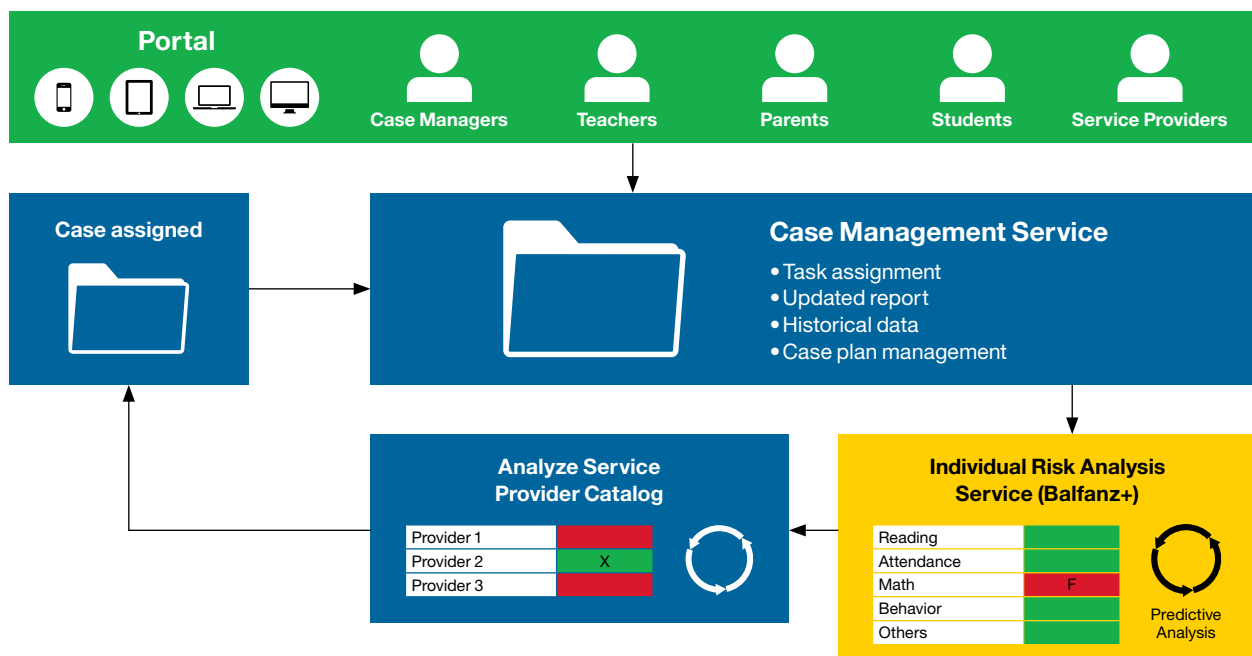


Figure 7
Youth Service Care System

Figure 7 shows the high-level design of the YSCS and an illustrative example how a student and stakeholders can be supported in the most effective, efficient and timely manner. In this example, the teacher updates the Early Warning System indicator template for his or her class. The Risk Analysis Service picks up an F grade in math for a student which, supported by the predictive analysis module and historical data, would warrant a preventive intervention. Accessing the Dynamic Service Provider Catalog, the system identifies Provider 2 as the nearest and best-fit service provider with capacity for math tutoring.

The case is assigned to Provider 2. The case manager and teacher could have access to this information, and initially both parents and students could be informed, via a push message service, that Provider 2 is ready to provide tutoring and to expect a call to schedule the first meeting. After a period of successful tutoring, Provider 2 updates the case in the system and refers it back. All stakeholders have restricted access to information through an easily accessible portal.

G. Insight to outcomes

In order to deliver an evidence-based, effective, efficient and comprehensive approach for dealing with youth disconnection, technology must be used for ensuring a holistic approach to prevention, intervention and reconnection for youth. The technology enablement will be leveraged by the entire Durham community, including, but not limited to, the following:

- Durham Public Schools (DPS)
- City of Durham
- County of Durham
- Durham Social Services
- Not-for-profit agencies

1. Findings

The City of Durham, County of Durham and the more than 1,500 service providers have a myriad of data and information-tracking systems with little to no data or information exchange, either formally or informally. Large institutions or service providers have data and information management and tracking systems, often enabled by technology. The vast majority of the not-for-profits, however, do not leverage technology for tracking information outside of spreadsheets.

This landscape of information in separate and parallel silos, primarily not enabled by technology, has created the following issues:

- Existence of many disparate data sources
- Lack of data visibility and accessibility
- Inconsistent, outdated and unreliable data and information
- No uniform way of describing data and information (taxonomy)
- Delays in accessing data, both inter- and intra-organizationally
- Inability to consistently define metrics and measures
- No capacity to holistically define youth disconnection indicators

“What are the statistics and how can we develop a system that we can all rely on that’s not just anecdotal?”

All of these issues have severely inhibited the community of Durham from collectively addressing the entirety of the youth population with a singularly focused vision.

All service providers involved in the different phases of a youth’s journey, which may include prevention, intervention and reconnection, are also limited by the inability to share inter-agency information and data governed on an as-needed basis due to the silos in which the information resides.

2. Recommendations

Our recommendations for approaching these issues may be broadly classified into four categories:

- Define and implement a comprehensive performance management system
- Create and adopt an information and data management strategy
- Architect and deploy a shared services platform
- Create a portal framework

Taken together, these recommendations combine to break down the silos of information, providing an enabling technology platform that may be leveraged by all organizations dealing with youth. The high-level benefits include:

- Universal taxonomy
- Inter-agency information sharing (on an as-needed and governed basis)
- Uniform architecture and shared services
- Consistent measures and metrics
- Uniform key performance indicators (lead and lag), dashboards and reports
- Efficient and effective information and data access
- Platform for proactive Early Warning System
- Information accessible through multiple platforms and devices, including Web portal and smartphones
- Business continuity

Comprehensive Performance Management System

A uniform information and data management strategy and shared services platform provide the technical means for a holistic Comprehensive Performance Management System (CPMS) for effective tracking of overall progress. A common CPMS, with agreed-upon metrics and measures across all organizations engaged in youth initiatives, provides both real-time views and a perspective on community progress over time, allowing for a better alignment of the collection of efforts.

“You must inspect what you expect.”

An effective CPMS will be a high priority for the Connect Youth Corps and the Youth Commissioner. All improvements and refinement of strategies must be based upon evidence from a strong underlying data tracking infrastructure. Ongoing aggregated data reporting and analysis allows for assessment against milestones, accountability across all youth success initiatives, and any enhancing strategies needed to drive success.

Finally, public reporting strategies will leverage the CPMS to produce dashboards of key performance indicators, enabling community-wide visibility of both progress and success.

Information and data management strategy

A universal information and data management strategy will enable the community of Durham to have a consistent data definition (taxonomy), while ensuring interoperability both inside and outside of Durham-owned information management systems.

An information and data management strategy will encompass the following:

- Identification of all existing information systems and their data models
- Creation of a universal taxonomy
- Establishment of clear data governance focused on as-needed information usage including security, access controls and auditing

This strategy will serve as the foundation for the Early Warning System, key performance indicators, reporting, dashboards and predictive analytics.

Shared Services Platform

The shared services platform is based upon the reference architecture shown in Figure 8. This is the enabling technology platform that will be leveraged by the youth Service Delivery Model, Youth Services Care System, Youth Connection Portal, and Early Warning System.

The shared services platform reference architecture is categorized into major service groupings: presentation, capabilities, security, integration and infrastructure. Each major grouping is then further broken down into service categories, such as case management. Each of these requires further description and must be viewed in the entirety of the Durham reference architecture.

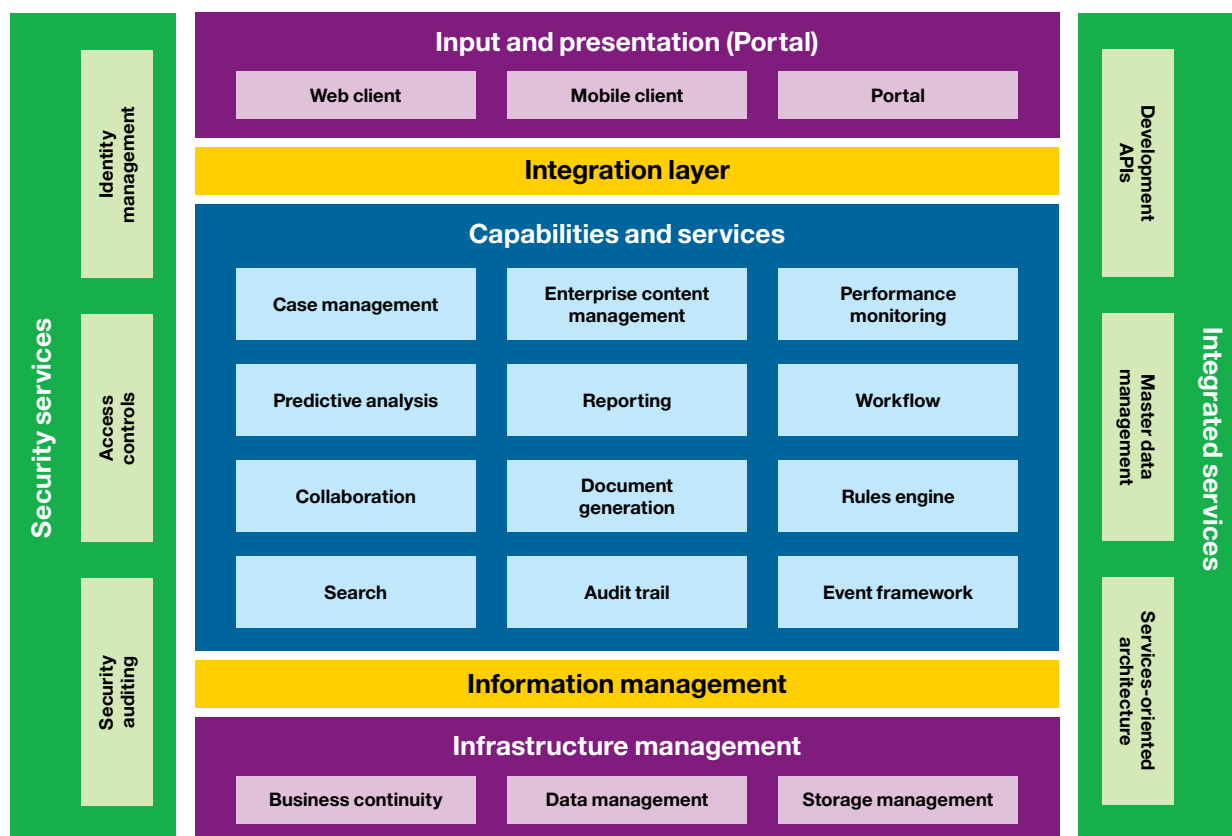


Figure 8
Shared services platform reference architecture

Portal strategy

The online portal is the primary means of accessing all information about a youth's journey by all stakeholders including youth, parents, educators and service providers. It is essential that the portal be designed with the ability to be deployed through multiple platforms such as computers, tablets, smartphones and other devices.

The Youth Connection Portal will use the shared services platform and the information and data management strategy, leveraging both for a comprehensive and secure channel for all stakeholders. The portal will also include a real-time dashboard for specific roles.

H. Roadmap and action plan

An integrated roadmap and rolling three-year action plan, tied to Durham's overarching vision and desired outcomes for addressing youth disconnection, will serve to coordinate ongoing efforts, capitalize upon resources and ensure benefits realization.

"Always focus on the front windshield and not the rearview mirror."

— Colin Powell

The roadmap and action plan lay the foundation for a more disciplined management process in driving results. The roadmap and action plan must include the following:

- Specific, measurable, action-oriented, results-oriented, and time-bound activities (SMART)
- Clearly defined tasks with assigned action owners
- Dependency identification
- Clearly defined success measures with benefits realization
- Behavioral, process and technology enablement actions

The roadmap is a "living document" which must be regularly tracked and reviewed, ensuring adjustments, if required, to meet timely delivery of results. The roadmap is broken into four phases of actions:

- **Phase 1:** Envision and set the path (0–6 months)
- **Phase 2:** Integrate and engage (6–12 months)
- **Phase 3:** Implement and scale (12–24 months)
- **Phase 4:** Monitor and sustain (24–36 months)

Figure 9 illustrates the actions in each phase.

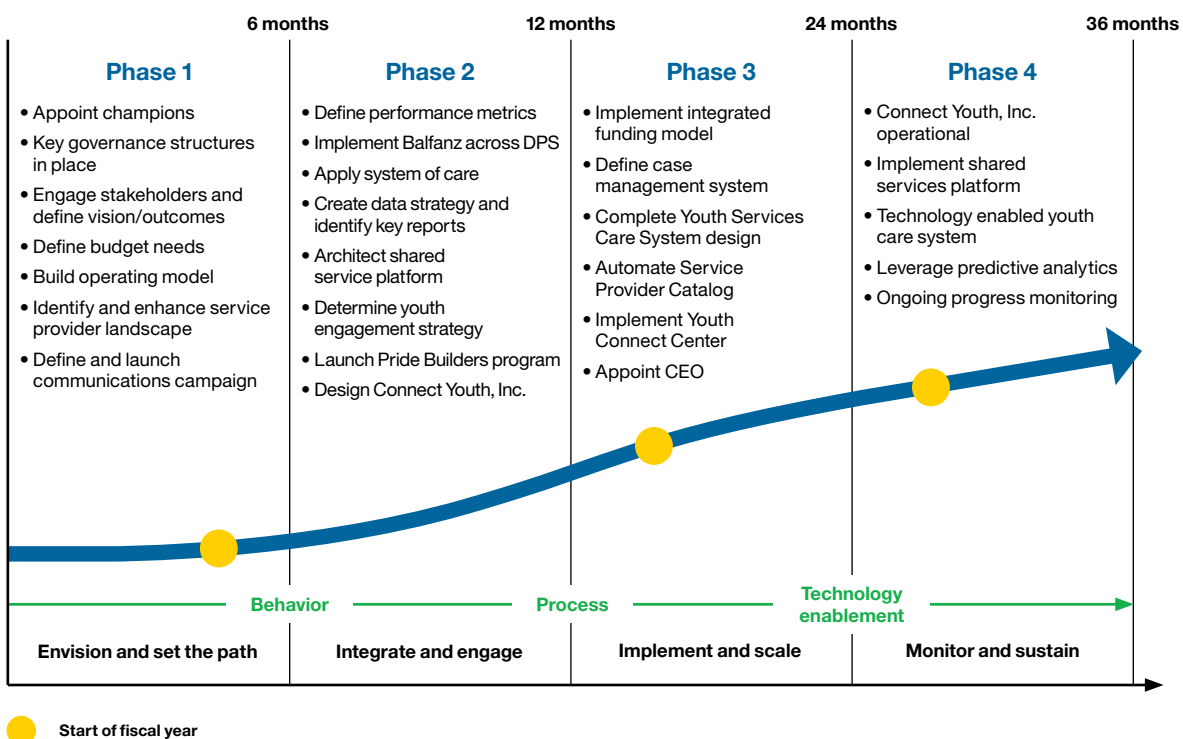


Figure 9
Roadmap and action plan

In Table 4, the roadmap and action plan is listed with the roadmap items for each phase, and its associated recommendation from Section 4.

Table 4 – Roadmap items for each phase

Phase	Roadmap item	Recommendation
Envision and set the path	Appoint champions	4.3
	Key governance structures in place	4.3
	Engage stakeholders and define vision and outcomes	4.1
	Define budget needs	4.4
	Build operating model	4.3
	Identify and enhance service provider landscape	4.7
	Define and launch communications plan	4.2
Integrate and engage	Define performance metrics	4.9
	Implement Balfanz across DPS	4.6
	Apply system of care	4.6
	Create data strategy and identify key reports	4.12
	Architect shared services platform	4.13
	Determine youth engagement strategy	4.6
	Launch Pride Builders program	4.3
	Design Connect Youth, Inc.	4.14
Implement and scale	Implement integrated funding model	4.4
	Define case management system	4.10
	Complete Youth Services Care System design	4.6
	Automate Service Provider Catalog	4.7
	Implement Youth Connect Center	4.3
	Appoint CEO	4.14
Monitor and sustain	Connect Youth, Inc. operational	4.14
	Implement shared services platform	4.13
	Technology-enabled Youth Services Care System	4.6
	Leverage predictive analytics	4.13
	Ongoing progress monitoring	4.9

4. Recommendations

4.1 Define and implement a common vision for youth success

Defining a common vision, across the multiple and diverse stakeholder groups, addressing youth disconnection and youth success provides a clear framework for collective and coordinated action.

Scope and expected outcomes

A process to define and adopt a common vision for success across the wide range of public, private and non-profit participants will include:

- The end-to-end youth journey
- A youth-centric perspective of needs and definition of success
- Core beliefs and values of the community
- Consistent measures of success
- Allowing for commitment and contribution from all stakeholders, and utilizing best-practice resources and tools to assist in community engagement processes
- Declaration of compelling outcomes
- Long-term objectives that are measurable and achievable
- Language and intent that is positive and inspiring

Following the adoption of a vision for youth disconnection, the leadership must drive collective ambition and answer the question of whether the community is really willing to invest and take the bold steps needed to substantially improve youth success. Any gaps identified in commitment and buy-in must be resolved to ensure progress.

Proposed owner	Suggested resources needed
<ul style="list-style-type: none">• Executive Leader• Commissioner for Youth Opportunity	<ul style="list-style-type: none">• Consider external facilitator to implement inclusive process for stakeholder engagement in vision definition• Estimated cost: Low
Dependencies	Key milestones, activities and time frame
<ul style="list-style-type: none">• Leadership and governance model (4.3)	<ol style="list-style-type: none">1. Appoint Youth Opportunity Commissioner (Phase 1)2. Use facilitator for vision creation (Phase 1)
Priority status	
High	

4.2 Design and launch an ongoing communications and engagement program

An ongoing communications and pride-building program focuses the Durham community on the overall vision and plan for addressing the issue of youth disconnection and builds participation in efforts to connect youth to opportunities.

Scope and expected outcomes

A coordinated communications and pride-building program supports realization of Durham's vision for connecting youth to opportunities, reinforcing the community's collective ambition, building pride and encouraging active participation by:

- Raising broad awareness of the overarching vision, goals and roadmap
- Providing a drumbeat of ongoing messages with a sense of progress and results
- Telling tangible success stories about youth, programs and services, jobs and opportunities
- Spotlighting business involvement and support
- Reinforcing the breadth of opportunities to get involved in and contributing to the work of valued non-profit and educational groups
- Describing innovative, leading-edge approaches under way, including results
- Raising visibility of role models and mentors
- Providing families with concrete knowledge of where to go for support

This would energize all stakeholders to build positive attitudes towards Durham, its schools and its youth, providing a greater hope and a sense of opportunity, encouraging more investors, grant providers, new residents and new businesses to join Durham.

Proposed owner	Suggested resources needed
<ul style="list-style-type: none"> • Youth Commissioner 	<ul style="list-style-type: none"> • Youth Opportunity Corps • Youth Council: Pride Builders • Cost estimate: Low
Dependencies	Key milestones, activities and time frame
<ul style="list-style-type: none"> • Vision (4. 1) • Roadmap and action plan (4.5) • Leadership and governance (4.3) • Funding and budget model (4.4) 	<ol style="list-style-type: none"> 1. Develop communication strategy (Phase 1) 2. Develop and execute 90-day rolling communication plan (Phase 1 and ongoing) 3. Identify required media budget (Phase 1) 4. Convene consultative forum of communication and youth engagement representatives (Phase 1) 5. Develop and execute rolling 90-day Pride Builders campaign (Phase 2 and ongoing)
Priority status	
Medium	

4.3 Define an overarching and unambiguous Governance Model

Defining and implementing a Governance Model to address youth disconnection would provide both the champions to lead and drive the change and the structures to design the program, coordinate implementation and hold stakeholders to account.

Scope and expected outcomes

Leadership, with the authority to act and bring the voice of the youth to the table, is vital to act as a catalyst and unite stakeholders. Governance structures are required to sustain a program to drive all stakeholders toward a common set of outcomes to which they would be held accountable. Specifically, the scope would encompass:

- The appointment of the champions to lead and drive the change
- Youth Opportunity Corps which would be the single entity to design the program and coordinate implementation
- Identification and assignment of staff to the Youth Opportunity Corps; identify and assign staff to the Operations Unit who will be full-time staff responsible for the day-to-day operations and set-up of the Enabling Infrastructure Task Force
- Definition of roles and responsibilities of all structures and functions, specifically using a RACI framework
- Definition of a clear decision-making process to provide clarity on how decisions will be made
- Naming of the Executive Council and creation of the Youth Council representing elected leaders and youth respectively
- Establishing a Consultative Forum that will be issue-based and would bring relevant stakeholders together
- Designing and implementing the operating model to supporting the governance arrangements

The right leadership with an unambiguous Governance Model is the foundation for coordinating action in connecting youth to opportunities, and making them productive members of their communities, in the workforce and society.

Proposed owner	Suggested resources needed
<ul style="list-style-type: none"> • Executive Leader • The County Manager, City Manager and DPS Superintendent for the Youth Opportunity Corps 	<ul style="list-style-type: none"> • Commissioner for Youth Opportunity • YOC Operations Unit – five funded positions covering budget and funding management, Strategic Planning and Operations, Change Management, BPR and service delivery, and an IT Lead
Dependencies	Key milestones, activities and time frame
<ul style="list-style-type: none"> • Funding and budget model (4.4) 	<ol style="list-style-type: none"> 1. Champions identified (Phase 1) 2. Youth Opportunity Corps established (Phase 1) 3. Operating Model Designed (Phase 1) 4. All Governance structures in place and operational (Phase 1)
Priority status	
High	

4.4 Review and enhance Funding and Budget Model

A critical prerequisite for setting up the overarching Governance Model and implementing a comprehensive program to address youth disconnection is to gain visibility of the budget and funding that is targeted to this issue and associated support services.

Scope and expected outcomes

The program roadmap outlines four phases in the first three years that require adequate funding. Since the initial County, City and DPS budgets are in draft status for the 2012-2013 fiscal year, it is imperative to start planning and assigning budgets before June 2012 to support Phase 1 and Phase 2 of the program, acting on:

- Initiating a process to study and document all existing funding streams and budgets to gain full budget visibility around youth disconnection (both discretionary and non-discretionary) and map all funding sources to current distributions
- Identifying of unassigned budgets, reserved for strategic initiatives
- Merging all funding and grant pools, and assigning them to the Youth Opportunity Corps to ensure funds are effectively distributed
- Defining program budget requirements for Phase 1 and Phase 2 and mapping those to available funds — potential gaps might be closed via:
 - Reallocation of a portion of other departmental budgets
 - Issuing bonds as a means of additional funding for the program
 - Federal, state and philanthropic grants supporting integrated programs
- Implement an integrated funding model and align County, City and DPS budgets to support a three-year rolling plan
- Apply both a top-down and bottom-up process for budget and funding
- Create a cost center to record and track funding on youth disconnection

The cost of inaction would be continued redundancy and ineffective distribution of funds to the non-profit sector and departments yielding poor results in targeted services to youth. Failing to systemically address youth needs and high school dropouts generates a lifetime net negative \$292,000 fiscal contribution versus high school graduates⁹, confines philanthropic funds, and discourages new businesses and residents from moving to Durham.

Proposed owner	Suggested resources needed
<ul style="list-style-type: none"> • Youth Opportunity Corps (YOC) 	<ul style="list-style-type: none"> • YOC Operations Unit member: Budget Specialist • Cost Estimate: Medium
Dependencies	Key milestones, activities and time frame
<ul style="list-style-type: none"> • Leadership and governance (4.3) • Benefits realization plan (4.5) • Performance management system (4.9) • County, City and DPS funding (4.4) 	<ol style="list-style-type: none"> 1. Youth budget identification (Phase 1) 2. Budget requirements needs and gaps closure (Phase 1) 3. Implement integrated funding model (Phase 2)
Priority status	
High	

4.5 Develop a roadmap and action plan to address youth disconnection

An integrated roadmap and three-year action plan, tied to Durham's overarching vision and desired outcomes for addressing youth disconnection, will better coordinate ongoing efforts, help capitalize upon resources and ensure that real benefits are realized.

Scope and expected outcomes

A roadmap and rolling three-year action plan will provide Durham with an integrated view of County, City, school, not-for-profit, and private sector initiatives addressing the issue of youth disconnection. Specific activities include:

- Developing concrete, executable actions
- Detailing activities and owners (accountable parties and collaborative input)
- Defining milestones and time frames
- Identifying and managing dependencies, such as resources and budget decisions, enabling tools and technologies, policies, and related assessments and initiatives
- Defining success measures and developing a benefits realization plan
- Articulating behavioral, process and technology enablement actions
- Identifying and managing risks through appropriate strategies for resolution

The action plan is a dynamic document with a process to actively monitor and track progress, and measure achievements against outcomes. The establishment and application of an integrated roadmap and plan will direct efforts in a coordinated way to address youth disconnection and optimize use of scarce resources. Without a plan, Durham's unaligned efforts will be diluted and less efficient.

Proposed owner	Suggested resources needed
<ul style="list-style-type: none"> • Youth Opportunity Corps 	<ul style="list-style-type: none"> • YOC Operations Unit • Program manager • Cost estimate: Low
Dependencies	Key milestones, activities and time frame
<ul style="list-style-type: none"> • Vision (4.1) • Leadership and governance (4.3) • Performance management system (4.9) 	<ol style="list-style-type: none"> 1. Develop roadmap and plan (Phase 2) 2. Agree on success measures (Phase 2) 3. Determine progress-reporting process and format (Phase 2)
Priority status	
High	

4.6 Design and implement a comprehensive Service Delivery Model

The Service Delivery Model defines an approach to systemically address the needs of youth from a holistic and youth-centric perspective.

Scope and expected outcomes

To support the vision, goals and objectives for addressing youth disconnection, the scope of the Service Delivery Model would include:

- Designing an Early Warning System to react to student distress signals, which can be used to redirect potential dropouts onto the path to graduation or employment opportunities
- Developing a service provider asset map with mission, capabilities and capacity identified
- Identifying case managers who will act as the integration point for individual students within the DPS student population, working in partnership with teachers and other providers
- Developing a campaign that builds greater teacher and business awareness
- Developing alternative and flexible pathways for youth who are no longer in the K-12 school system or choose alternative learning models
- Providing to teachers (and others, as applicable) access to an integrated view of a student's data and guidance to appropriate services as required (through a teachers' portal)
- Enhancing teacher development programs to help them be more effective in understanding and addressing youth disconnection
- Expanding existing programs to support the growing Latino population
- Enriching the Common Core teacher curriculum for the identification, referral and teaching of students with mental health issues

The Service Delivery Model will provide teachers, service providers, businesses and others a way to ensure the individual needs of each youth are addressed in a timely and efficient manner. Through the introduction of a case manager responsible for the integrated care of students, a systemic approach is possible to ensure youth success through K-12 education, thus positioning them for post-secondary education or the workforce.

Proposed owner	Suggested resources needed
<ul style="list-style-type: none"> • Youth Opportunity Corps (YOC) 	<ul style="list-style-type: none"> • YOC Operations Unit engaging with DPS Superintendent, teachers, service providers and students • Enabling Infrastructure Task Force • Cost estimate: Medium
Dependencies	Key milestones, activities and time frame
<ul style="list-style-type: none"> • Vision (4.1) • Budget and funding model (4.4) • Communication and engagement program (4.2) • Leadership and governance model (4.3) • Roadmap and action plan (4.5) 	<ol style="list-style-type: none"> 1. Service provider landscape (Phase 1) 2. Updated Common Core teacher curriculum (Phase 1)) 3. Enhance programs for Latino population (Phase 1) 4. Implement Balfanz DPS-wide (Phase 2) 5. System-of-care approach (Phase 2) 6. Define case management program (Phase 3)
Priority status	
High	

4.7 Develop and implement a Dynamic Service Provider Catalog

The establishment of a Dynamic Service Provider Catalog ensures youth and all stakeholders have all relevant service provider information readily accessible.

Scope and expected outcomes

To support the Youth Services Care System, the scope of developing and implementing a Dynamic Service Provider Catalog will involve the identification of service providers across the youth services landscape, enhancements to the evolving service provider map, as well as links to the Youth Services Care System. Specific activities include:

- Implementing a comprehensive service provider map, listing the service provider's name, address, services provided, quality measures, capacity and youth segments served
- Mapping service providers to categories, such as mental health, mentoring, tutoring, day care, or English as a second language
- Identifying service gaps
- Designing and implementing a Dynamic Service Provider Catalog, enabled through technology

A Dynamic Service Provider Catalog enables youth and stakeholder access to appropriate service providers with the capability and capacity to meet youth needs. This solution will reduce existing redundancies, optimize service quality and coverage, and ensure real-time mapping of "supply and demand" to improve efficiency over time.

Proposed owner	Suggested resources needed
<ul style="list-style-type: none"> • Youth Opportunity Corps 	<ul style="list-style-type: none"> • YOC Operations Unit • Technology: Shared Services Platform • Cost estimate: Low (manual)/Medium (automation)
Dependencies	Key milestones, activities and time frame
<ul style="list-style-type: none"> • Service Delivery Model (4.6) • Shared-services platform (4.13) • Information and data management strategy (4.12) • Performance management system (4.9) 	<ol style="list-style-type: none"> 1. Identify service providers and complete map (Phase 1) 2. Publish service provider map and keep it updated (Phase 1) 3. Automate Service Provider Catalog (Phase 3)
Priority status	
High	

4.8 Teacher skills development and awareness program

A teacher skills development and awareness program will further equip teachers to better support youth through their K-12 school years and ultimately connect youth to opportunity.

Scope and expected outcomes

The teacher skills development and awareness program will build awareness and enhance current curriculum in DPS for teachers, counselors and staff, including:

- Developing and disseminating informative documentation (such as announcements, e-mail notifications and flyers) that contain the vision, goals and objectives of Durham's initiative for addressing youth disconnection
- Enhancing the Common Core curriculum to include specific training about:
 - Engaging youth with special needs
 - Appreciation for specific circumstances faced by Latino youth
 - Identification and support of students with mental health issues and determination of services they may need
- Enhancing teacher and counselor curriculum with focus on actions and service providers available to address the varying needs of youth disconnection
- Establishing public forums similar to Superintendent Becoats' "Listening and Learning Tour" focused on getting the message out regarding youth disconnection
- Integrate with communications plan to ensure appropriate awareness programs are developed and accessible to teachers and others in DPS

Having a teacher- and school-specific program will create an environment conducive to adaptively supporting prevention, intervention and recovery across the youth's journey and improving the outcomes in addressing youth disconnection.

Proposed owner	Suggested resources needed
<ul style="list-style-type: none"> • Executive Leader • Youth Opportunity Commissioner 	<ul style="list-style-type: none"> • Youth Opportunity Corps • Cost estimate: Low
Dependencies	Key milestones, activities and time frame
<ul style="list-style-type: none"> • Budget and funding (4.4) • Leadership and governance (4.3) • Roadmap and action plan (4.5) 	<ol style="list-style-type: none"> 1. Documentation and materials that describe youth disconnection initiative 2. Updated teacher curriculum (Phase 1)
Priority status	
Medium	

4.9 Define and implement a comprehensive performance management system

Defining and implementing a comprehensive performance management system will allow for effectively tracking progress in addressing youth disconnection and measuring achievement against defined outcomes.

Scope and expected outcomes

Key stakeholders, including the County, City and DPS, must come together and commit to delivering a consolidated and comprehensive performance management system, including:

- Identifying key performance metrics based on goals and outcomes defined in the common vision
- Defining an associated taxonomy related to performance management
- Defining the frequency of input from stakeholders
- Selecting key milestones and objectives from common vision goals, from which to assess progress on continuing basis
- Designing and implementing the underlying performance management process to address youth disconnection
- Defining and agreeing on frequency of reporting and performance status assessment (such as monthly)
- Engaging stakeholders to agree on public “report card” content, frequency and format that will be used to track progress
- Providing appropriate training and awareness to relevant stakeholders to understand the process, metrics and performance management system
- Aligning to the budget initiatives and specifically detailing requirements for funding and grant applications

A common performance management system across the broad public, private and non-profit groups engaged in youth support efforts will enable a real-time view of status, progress towards youth success over time, and allow for better alignment of efforts across these diverse organizations.

Proposed owner	Suggested resources needed
<ul style="list-style-type: none"> • Youth Opportunity Corps 	<ul style="list-style-type: none"> • YOC Operations Unit member: project manager, working with Youth Opportunity Corps leaders and stakeholders • Consider external consultant to advise of best practices for performance management systems • Cost Estimate: Medium
Dependencies	Key milestones, activities and time frame
<ul style="list-style-type: none"> • Vision (4.1) • Leadership and governance (4.3) • Service Delivery Model (4.6) 	<ol style="list-style-type: none"> 1. Launch performance management system workgroup (Phase 2) 2. Creation of performance management system metrics (Phase 2) 3. Architecture of the performance management system (Phase 2) 4. Deployment of the performance management system on shared services platform (Phase 3)
Priority status	
Medium	

4.10 Implement an integrated Youth Services Care System

The integrated Youth Services Care System enables all stakeholders to assist the youth through their journey in the most effective and efficient manner.

Scope and expected outcomes

To support the vision and the overarching Service Delivery Model, the scope of the integrated Youth Services Care System involves the design and development of a portal and a case management system, enhancements to the evolving Early Warning Systems, and links to the Dynamic Service Provider Catalog. The scope will include:

- Designing/implementing an integrated Youth Services Care System
- Establishing a secure portal for key stakeholders
- Creating a comprehensive Dynamic Service Provider Catalog
- Implementing common success criteria and metrics for service providers
- Implementing an integrated case management system which is youth-centric and supports individuals through their journey. Key components:
 - Individual historical data and individual care plans readily available
 - Early Warning Risk Indicators (Balfanz+) determining needed actions
 - Documentation of preventive interventions, actions and outcomes
 - Link to Service Provider Catalog, mapping to best services
 - Workflow capability to manage referrals, handoffs and feedback loops
 - Reporting capabilities.

The Youth Services Care System provides stakeholders with real-time access to youth-centric data, applies predictive analysis to determine appropriate preventive actions, providing the right services to youth and helping them to get back on track. The cost of inaction is deemed significant, as timely and adequate support is left to chance and informal networks, thus negatively impacting the community in a variety of areas, such as philanthropic support and dropout costs.

Proposed owner	Suggested resources needed
<ul style="list-style-type: none"> • Youth Opportunity Corps • Individual case managers 	<ul style="list-style-type: none"> • Technology: shared services platform • Youth Opportunity Corps (Operations Unit and Enabling Infrastructure Task Force) • Cost estimate: High
Dependencies	Key milestones, activities and time frame
<ul style="list-style-type: none"> • Budget and funding (4.4) • Service Delivery Model (4.6) • Dynamic Service Provider Catalog (4.7) • Shared services platform (4.13) • Information and data management (4.12) 	<ol style="list-style-type: none"> 1. Complete Service Provider Map (Phase 1) 2. Implement Early Warning System (such as Balfanz) across DPS (Phase 2) 3. Define and implement Youth Services Care System (Phases 2 and 4) 4. Design and implement case management system (Phases 2 and 4)
Priority status	
Medium	

4.11 Define and implement a portal strategy

An online portal will be the primary means for all stakeholders — youth, teachers, parents and service providers — to access the enabling technology platform addressing youth disconnection.

Scope and expected outcomes

Supporting the youth's journey and all interactions with various service providers, the Youth Connection Portal will be the primary means of accessing and updating all information and data encompassing services related to prevention, intervention and recovery. This project includes:

- Defining the portal framework and architecture
- Determine solution technology options
- Identifying all modes of delivery, such as computer, tablet or smartphone
- Defining role-based access with strict adherence to data privacy
- Building the portal to meet design and stakeholder requirements
- Designing the underlying security architecture
- Defining the infrastructure requirements
- Defining the ongoing support and maintenance requirements, including operational management
- Defining content management processes, such as ownership and updates, and associated workflow processes
- Identifying pilot and rollout strategy
- Scheduling progressive rollout of the portal to user groups

Enabling the Youth Services Care System and the Service Delivery Model through technology will catapult forward the efforts to address youth disconnection by improving the timeliness and effectiveness of youth services delivery.

Proposed owner	Suggested resources needed
<ul style="list-style-type: none"> • Youth Operations Unit 	<ul style="list-style-type: none"> • YOC Enabling Infrastructure Task Force members: project manager, usability expert and IT architect • YOC Operations Unit member: business liaison • Design input representatives from: <ul style="list-style-type: none"> – Non-profit agencies – Durham Public Schools – Higher education – Businesses – Durham Chamber of Commerce – Durham Social Services • Cost Estimate: Medium
Dependencies	Key milestones, activities and time frame
<ul style="list-style-type: none"> • Leadership and governance (4.3) • Service Delivery Model (4.6) • Integrated Youth Services Case System (4.10) • Service Provider Catalog (4.7) • Information and data management strategy (4.12) • Shared services platform (4.13) • Performance management system (4.9) 	<ol style="list-style-type: none"> 1. Define portal strategy (Phase 3) 2. Implement portal strategy (Phase 4)
Priority status	
Low	

4.12 Define and implement an information and data management strategy

An information and data management strategy will define the taxonomy and standards, the data governance process, and relevant enablers to support analytics, real-time monitoring, and reporting.

Scope and expected outcomes

In support of the Youth Services Care System, the information and data management strategy will be both the unifying language and the consistent data model enabling consistency, and is a prerequisite for the shared services platform. This project encompasses:

- Identifying all data sources and systems supporting the Youth Services Care System
- Creating a universal taxonomy to support the Youth Services Care System
- Establishing clear data governance focused on as-needed usage, including security, access controls and auditing
- Defining Early Warning System metrics and measures
- Defining key performance indicators for reporting and dashboards
- Defining reports for all stakeholders
- Defining dashboards for real-time monitoring by role and organization
- Defining predictive analysis strategy

With the definition and implementation of a holistic information management, data management, and reporting approach, both the City and County of Durham will be enabled to leverage information and data to its fullest extent, ensuring consistent definition, understanding, accuracy, insight and interoperability.

Proposed owner	Suggested resources needed
<ul style="list-style-type: none"> • YOC Enabling Infrastructure Task Force Leader 	<ul style="list-style-type: none"> • YOC Enabling Infrastructure Task Force members: project manager, specialists to define Early Warning System indicators and predictive analytics • YOC Operations Unit member: business liaison • Reports designer for key performance indicators and reports definition • Education subject matter expert • Health and Human Services subject matter expert • Cost Estimate: Medium
Dependencies	Key milestones, activities and time frame
<ul style="list-style-type: none"> • Leadership and governance (4.3) • Service Delivery Model (4.6) • Integrated Youth Services Case System (4.10) • Dynamic Service Provider Catalog (4.7) 	<ol style="list-style-type: none"> 1. Define performance metrics (Phase 2) 2. Define key reports (Phase 2) 3. Implement Balfanz+ indicators (Phase 3) 4. Design intra-stakeholder service level agreements (Phase 3)
Priority status	
Medium	

4.13 Create shared services platform

Creation of a shared services platform with a single, uniform way of accessing information and data, enables all stakeholders to have timely, accurate information governed by security and access controls.

Scope and expected outcomes

In support of the integrated Youth Services Care System and the Youth Service Delivery Model, the shared services platform is the enabling technology. It provides the platform for delivering the multi-modal access (such as Web portal, smartphone or tablet) and the information management services for building the Early Warning System for Balfanz+ indicators for prevention and intervention. The shared services platform also provides the technical basis for the Dynamic Service Provider Catalog. Specifically, the shared services platform includes:

- Defining a shared services platform reference architecture
- Selecting the appropriate technology (software and hardware)
- Implementing the shared services platform reference architecture with software
- Creating an integration strategy to and from the shared services platform with existing key Youth Services Care System systems
- Defining intra-agency service level agreements on data sharing
- Defining business continuity, including redundancy and availability
- Defining the underlying security architecture
- Defining and implementing the ongoing support and maintenance strategy plan

Through the shared services platform, the system to address youth disconnection more holistically can become a reality. The investment in this core infrastructure will have long-term benefit to the City, County, DPS and other stakeholders, reducing the cost of compliance and reporting, and can be leveraged beyond disconnected youth, providing a more integrated ecosystem to deal with social challenges in the future.

Proposed owner	Suggested resources needed
<ul style="list-style-type: none"> • Enabling Infrastructure Task Force Leader 	<ul style="list-style-type: none"> • Project manager — IT lead • YOC Operations Unit member: Business liaison • Enabling Infrastructure Task Force members: IT architect and integration specialist • Cost: High (initially); Lower total cost of ownership
Dependencies	Key milestones, activities and time frame
<ul style="list-style-type: none"> • Leadership and governance (4.3) • Service Delivery Model (4.6) • Integrated Youth Services Care System (4.10) • Information and data management strategy (4.12) • Service Provider Catalog (4.7) • Portal strategy (4.11) • Performance management system (4.9) 	<ol style="list-style-type: none"> 1. Develop information and data management strategy (Phase 2) 2. Architect shared services platform (Phase 2) 3. Automate Service Provider Catalog (Phase 3) 4. Implement shared services platform (Phase 3) 5. Integrate case management system to shared services platform (Phase 4) 6. Fully deploy portal as part of shared services platform (Phase 4) 7. Fully deploy analytics as part of shared services platform (Phase 4)
Priority status	
Medium	

4.14 Set up the corporation for employment opportunities — Connect Youth, Inc.

The corporation for employment opportunities supports alternative pathways to employment, particularly for youth who do not see a future path through traditional higher education institutions.

Scope and expected outcomes

Adopting international best practices in vocational education and training, the corporation, set up as a community investment corporation based on the North Carolina Benefits Corporation Act, would be a viable and self-supporting business connecting youth to employment opportunities. This initiative includes:

- Consulting with relevant stakeholders, the business community and investors on the concept and direction the corporation will take
- Working with elected leaders at the City, County and state level to effect any policy or legislative changes to facilitate the creation of the independent investment corporation
- Developing a business plan for operations, and seeking the appropriate investment and buy-in for seed funding
- Designing the corporation and the business and operating models
- Designing the brand and associated marketing of the corporation as Connect Youth, Inc.
- Appointing the CEO
- Launching Connect Youth, Inc. and beginning operations
- Reporting and demonstrating progress to the Youth Opportunity Corps and directly to the County and City Managers.

Proposed owner	Suggested resources needed
<ul style="list-style-type: none"> • City Manager (lead) • Youth Opportunity Corp 	<ul style="list-style-type: none"> • CEO • Business unit managers for each business • CFO • Shared-services manager and direct reports including: HR, business development, grant application, education and training, strategy and marketing, contracts, IT services • Cost Estimate: High
Dependencies	Key milestones, activities and time frame
<ul style="list-style-type: none"> • Leadership and governance (4.3) 	<ol style="list-style-type: none"> 1. Business plan (Phase 2) 2. Investor and political buy-in (Phase 2) 3. Design of the corporation (Phase 2) 4. Appointment of CEO (Phase 3) 5. Corporation becomes operational (Phase 4)
Priority status	
Medium	

5. Conclusion

The City of Durham, along with many US cities, is grappling with the critical issue of youth disconnection, which directly relates to unemployment, crime, poverty, strained social services and underdeveloped neighborhoods. These, in turn, negatively impact a city's ability to attract new businesses, investments and residents. More importantly, a generation of youth is losing opportunities to become fulfilled and contributing members of society. As the City of Durham, County of Durham and Durham Public Schools, along with non-profit organizations, finalize their strategy, budget and plans for 2012–2013, the time is right for the community to put a more concerted effort toward battling youth disconnection.

The City has acknowledged the issue of youth disconnection as a key priority and made this the subject of its Smarter Cities Challenge application. Durham already has an abundance of political will and community desire to improve the opportunities for all its youth to connect, or reconnect, to success in school and a productive working life. The community can make substantive progress in reaching this goal if it approaches its efforts as a coordinated transformational change program.

The recommendations in this report encompass the critical success factors for transformational change:

- Clearly describe the **change vision and goals**
- Actively **involve leaders** in owning the change
- **Assess the change impact and plan** how change will be managed
- **Engage and prepare the community** to adopt the new way of working
- **Align the stakeholders** to enable and reinforce desired behaviors
- **Monitor adoption** of the change to ensure desired outcomes are realized

The City needs to move swiftly to establish a unifying leadership team and governance approach, then must begin to build broader awareness of the overall direction and collective ambition to achieve real change for youth in Durham. A communications and Pride Builders program can help to energize all stakeholders and build positive attitudes towards Durham, its schools and its youth. Youth will have a greater sense of hope and see the many roads available for them to become thriving citizens and members of the community.



6. Appendix

A. Acknowledgements

The Smarter Cities Challenge team would like to thank and acknowledge everyone that assisted in making this successful from within the community of Durham.

Name	Title and Organization
William V. "Bill" Bell	Mayor, City of Durham
Tom Bonfield	Durham City Manager
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Loretta Clyburn	City of Durham, Deputy Chief of Police
Rhonda Parker	Director, Durham Parks and Recreation
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Yaneta Sanchez-Brown	Dean of Adult Education and Basic Skills, Durham Technical Community College
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Kevin Rome	Vice Chancellor for Student Affairs, North Carolina Central University
Jason Dorsette	Director of the Centennial Scholars Program and Male Initiatives, North Carolina Central University
Dr. Jim Johnson	Director, Urban Investment Strategies Center and William R. Kenan Jr. Distinguished Professor of Strategy and Entrepreneurship, University of North Carolina at Chapel Hill
Dr. Eric Becoats	Superintendent, Durham Public Schools
Theresa McGowen	Preventive Services Coordinator, Exceptional Children's Program/Student Support Services, Durham Public Schools
Michelle H. Smith	Director of Student Services, Durham Public Schools
Janet Cherry	Director, Chewning at Red Mill Program, Durham Public Schools
Barbara Goins	North Carolina Wise LEA Coordinator Durham Public Schools
Minnie Forte-Brown	Chair, Durham Public Schools Board of Education
Heidi Carter	Vice Chair, Durham Public Schools Board of Education
Jim Stuit	Program Manager, Durham County Gang Reduction Strategy (GRS)
Newman Aguiar	Citizen Liaison, Durham County Gang Reduction Strategy (GRS)
Ann Oshel	Director, SAMSA Grant Coordinator, The Durham Center
Tonya Van Deinse	Project Director, BECOMING Durham, The Durham Center
Casey Steinbacher	President, Greater Durham Chamber of Commerce
Christopher Gergen	Executive Director, Bull City Forward
Barker French	Chairman, East Durham Children's Initiative

Name	Title and Organisation
David Reese	Director, East Durham Children's Initiative
David Dodson	President, MDC Inc.
Max Rose	Autry Fellow, MDC Inc.
Cay Stratton	Senior Fellow, MDC Inc.
Bud Lavery	Executive Director, Communities in Schools
Bryan Huffman	Executive Director, Durham YMCA
Malcom Reed	Founder/CEO, D3 Community Outreach, Inc.
Gayle Erdheim	Director of Academic Programs, Achievement Academy of Durham
Pilar Rocha-Goldberg	President and CEO, El Centro Hispano
Jim Goodmon	President, Capitol Broadcasting Company
Michael Goodmon	Vice President Real Estate, Capitol Broadcasting Company
Marcia Morey	Chief District Court Judge, State of North Carolina, Office of the Courts
Mike Ruffin	County Manager, County of Durham
Marqueta Welton	Deputy County Manager, County of Durham
Drew Cummings	Assistant County Manager, County of Durham
Steven Williams	Member, Durham Workforce Development Board
Tatiana DeBerry	President, Durham Youth Commission
JaKayla Hart	Vice President, Durham Youth Commission
William Cagle	Member, Durham Youth Commission
D. Carr Thompson	Senior Program and Communications Officer, Burroughs Wellcome Fund
Mary Moore	Career Readiness Certificate Program Coordinator and Orange County HRD Coordinator, Durham Technical Community College
Dallas Parks	CEO, Durham Housing Authority
Suzanne Hershey	Founder, Community Synch; Ready by 21 (Austin, Texas)
Michael Schoenfeld	Vice President for Public Affairs and Government Relations, Duke University
Tracy Drinker	Corporal, City of Durham Police Department
Corporal Peterson	Corporal, City of Durham Police Department
Wisdom Pharaoh	President, McDougald Terrace Housing Association
Lamar Smith	Student, D3 Community Outreach
Brendon Ray	Student, D3 Community Outreach
60+ Durham young adults, representing Durham Voices of Youth	Emily K Center, Lowe's Grove Middle School, D3 Community Outreach Inc. Durham Youth Commission, and other locations

B. Team profiles



Peter Kretzschmar

Program Director, Alliances and IP Solutions, IBM CHQ
Austin, Texas

Peter Kretzschmar works for IBM corporate headquarters as a Business Development Manager for Alliances and Intellectual Property Solutions. In this position, he engages with technology partner accounts worldwide to define and implement collaborative relationships including technology and patent licensing, marketing, and joint development agreements. Over his 30-year career, he has held multiple staff, management and executive positions in the areas of software development, electronics manufacturing, and account relationship management. Peter earned his bachelor's degree, and Master of Public Health degree from the University of Michigan in Ann Arbor. He has served in multiple roles in the Austin community focusing on improving K-12 education success with United Way Capital Area, and on the Board of Directors and Leadership Circle for Communities in Schools Central Texas. He also has extended ties with higher education, having served as an adjunct faculty with the University of Texas School of Law, and is currently a member of the Advisory Council for the UT School of Social Work.



Mary Harris

Senior Program Manager, Demand Management, Global Resource and Capacity Management, Global Business Services
Atlanta, Georgia

Mary Harris is a Senior Program Manager in IBM's Global Business Services (GBS) Resource and Capacity Management Organization, with more than 25 years of experience in program and project management of client-based engagements, as well as IBM global programs and initiatives. Mary is extremely knowledgeable of IBM internal tools and applications in support of high-quality customer deliverables and solutions. She has excellent project management, analytical and communication skills, and possesses excellent business acumen, as well as a deep understanding of GBS business processes, objectives and procedures. She is able to motivate others in producing a winning team. An energetic, innovative professional with a sense of team, Mary's projects have been successful and resulted in not only cost-effective solutions, they have generated millions of dollars of revenue to IBM. Mary holds a Master of Business Administration degree in Business and Management from Pepperdine University in Malibu, CA and a Bachelor of Arts degree in Mathematics from Fisk University in Nashville, TN. Mary also volunteers with Junior Achievement, Boys and Girls Club, and local schools in the Atlanta area.


Kinthi D.M. Sturtevant

Director, Organizational Change
Management Center of Excellence
IBM CHQ, Enterprise Transformation
Somers, New York

Kinthi Sturtevant is Director of IBM's Organizational Change Management Center of Excellence, a part of IBM's corporate Enterprise Transformation group, with the responsibility to help improve IBM's ability to realize business benefits from its enterprise-wide transformation initiatives. Kinthi has more than 25 years experience as both a line executive and strategic consultant, leading IBM and client teams through large-scale transformational change programs from design to implementation. Projects have included marketing strategy; sales force productivity; outsourcing; complex process and systems implementations; culture, values and change-readiness programs; communications strategies; leadership commitment and employee engagement; organization design; training and skill development strategies. Kinthi has an Masters of Organizational Psychology, Change Management and Consultation from Teachers College, Columbia University; a Bachelor of Psychology from Yale University; and an associate's degree in Marketing from the State University of New York. She also has certificates in "Managing Technical Professionals" from MIT and "Advanced Organizational Change" from Harvard Business School.


David Gómez, Jr.,

Worldwide Advanced Case Management
Technical Professional Leader, Sr.
Certified Executive IT Specialist, IBM
Software Group — Costa Mesa, California

David Gómez, Jr., is a Distinguished Executive IT Specialist working as the Worldwide Advanced Case Management (ACM) Technical Professional Leader. He has worked in the enterprise content management space for the past 11 years, and has more than 23 years of professional experience in both the public and private sectors. During the past 13 years, he has held various roles in both sales and marketing. David currently guides technical professionals in understanding the ACM market and how to articulate an ACM-focused product, called IBM Case Manager, to organizations of supra-regional and multinational nature in the banking, insurance, utilities, and government industries. He also mentors technical sales professionals globally. He leads a business process management lab leveraging IBM's Innov8 serious game at the University of Southern California's Marshall School of Business each semester. He is a guest lecturer at Pepperdine University's Graziadio School of Business and Management in their graduate marketing management classes and also is an adjunct faculty member at the University of Phoenix's John Sperling School of Business. David holds a Master of Business Administration with a dual emphasis in finance and entrepreneurship from Pepperdine University. He has a Bachelor of Science in Management from Pepperdine University and is also certified as a Distinguished IT Specialist by The Open Group.



Permenthri Pillay

Associate Partner, IBM Global Business Services for Public Sector
Canberra, Australia

Permenthri Pillay is an Associate Partner in IBM Global Business Services for Public Sector. She is based in Canberra, Australia and leads the Revenue and Policy Industry for GBS in Australia. Permenthri has extensive experience in social services and worked for more than eight years, both with IBM and Booz & Company, with social service agencies at the federal and state level. Permenthri has more than 17 years experience consulting to government and social services agencies, in Australia, and South Africa. Permenthri has worked with, and consulted to, many federal government agencies including: the Australian Taxation Office, Centrelink; Department of Human Services; Department of Finance; Department of Immigration and Citizenship; Department of Climate Change and Energy Efficiency; the Australian Bureau of Statistics; and the Global Carbon Capture and Storage Institute. Permenthri has worked with state and local governments, including the Department of Human Services in Victoria, Australia, and the City of Cape Town, South Africa. Permenthri has a B.Com degree from the University of Natal in Pietermaritzburg, South Africa, and is on the Institute for Public Administrators Australia (IPAA) Judging Panel in Australia for the Prime Minister's Award for Excellence in Public Sector Management. Permenthri has spoken on public sector management, including the subject of "Service Delivery Transformation — The challenge for Government toward greater economic and social inclusion" at the International Congress on Working Communities hosted by National Employment Services Australia.



Theo Leuze

Director of Strategic Initiatives and Business Transformation,
IBM Global Financing
Herrenberg, Germany

Theo Leuze is a Director of IBM Global Financing (IGF), leading worldwide strategic initiatives e.g. designing and implementing IGF's Single Operating Model and integrating worldwide processes and tools with IBM's largest business transformation initiative, Blue Harmony. He is also responsible for the Business Transformation organization in Europe, Asia Pacific. Prior to this role he was leading IGF's Central Region Organization (Germany, Austria and Switzerland) for more than three years after returning from his assignment in the US, where he was Executive Assistant to IGF's Worldwide General Manager. Earlier, Theo held numerous sales, management and leadership positions in Treasury, Finance and IGF, including leading IBM Germany Credit Bank. He joined IBM in 1990. Prior to IBM, he worked as a Business Consultant Leader in a German commercial bank. Theo holds a Master of Business Administration in Finance from University of Mannheim.

C. References

Disconnected Youth in the Research Triangle Region: An Ominous Problem Hidden in Plain Sight; A Report to the North Carolina GlaxoSmithKline Foundation produced by MDC, Inc.
<http://www.mdcinc.org/docs/disconnected-youth.pdf>

Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century; Harvard Graduate School of Education, February 2011

Durham Public Schools, Drop Out Recovery Initial Recommendations; Bull City Forward, Chris Gergen, Executive Director, February 2012

Meeting the Challenge of Corporate Entrepreneurship; Harvard Business Review, October 2006

Ready Thoughts, Commentary from Ready by 21 Leaders; The Forum For Youth Investment, Washington D.C.

PIC Programs: An Overview; Boston Private Industry Council, Boston, MA

Jobless Rate Higher for Blacks; Jim Wise, The Durham News, February 19, 2012

Superintendents Discuss Schools Achievement Gap; Katelyn Ferral, The News and Observer, February 2012

An Early Warning System; Ruth Curran Neild, Robert Balfanz, and Liza Herzog, Educational Leadership, October 2007

Proposal to Establish The North Carolina High School Graduation Center; Ann Brewster, Duke University, August 2010

Teacher Support and the School Engagement of Latino Middle and High School Students at Risk of School Failure; Ann B. Brewster, Gary L. Bowen, Child and Adolescent Social Work Journal, Vol. 21, No. 1, February 2004

Developing Early Warning Systems to Identify Potential High School Dropouts; Jessica B. Heppen, Susan Bowles Therriault, National High School Center, July 2008

The Positive Youth Development Approach To High School Graduation and Beyond; presentation to North Carolina Collaboration for Children, Youth and Families, Ann Brewster, Duke University, April 2010

2011 City of Durham Resident Survey, Draft Report; etc Institute, February 2012

Budget Documents; City of Durham, Durham County, Durham Public Schools, 2011-2012

Strategic Plan; Durham County, 2012

Strategic Plan; City of Durham, 2012

Strategic Plan; One Vision. One Durham; Durham Public Schools, 2012

A Model for Change; Pilar Rocha-Goldberg, El Centro Hispano, January, 2012

The Minority Male Bridge to Success Project; Jim Johnson Jr, Mark McDaniel, Kenan-Flagler Business School, University of North Carolina at Chapel Hill, August 2011

The Reconnection Project, A Holistic Approach to Durham's Disconnected Youth; Draft, YMCA Durham, February 2012

Leading outside the Lines, Jon R. Katzenbach and Zia Khan – for the phrase “Pride Builders”

D. Support opportunities and best practices

Ready By 21

The Durham community may consider partnering with external organizations for pursuing success in tackling youth disconnection. A number of organizations have achieved an evidence-based record of success and could be valuable in providing best-practice advice, consultation and support. One such provider is the Forum for Youth Investment and their Ready by 21® program. Ready by 21 is a set of innovative and proven strategies that help communities improve the odds that all children and youth will be ready for college, work and life.

The Ready by 21 National Partnership is a project of the Forum for Youth Investment, a nonprofit, nonpartisan “action tank” dedicated to helping communities and the nation make sure all young people are ready for college, work and life. United Way Worldwide is the signature partner. Mobilization partners include the American Association of School Administrators, America’s Promise Alliance, the National Collaboration for Youth, the National Conference of State Legislatures, and other leading organizations. A number of technical partners offer state-of-the-art support tools and incentives.

Ready by 21 has a strong history of success in more than 75 communities in 25 states, providing youth and adult leaders with the information, connections, tools and support they need to create greater opportunities and outcomes for young people. Based on both rigorous research and practical experience, the Forum forges innovative strategies and partnerships to strengthen solutions for young people and those who care about them.

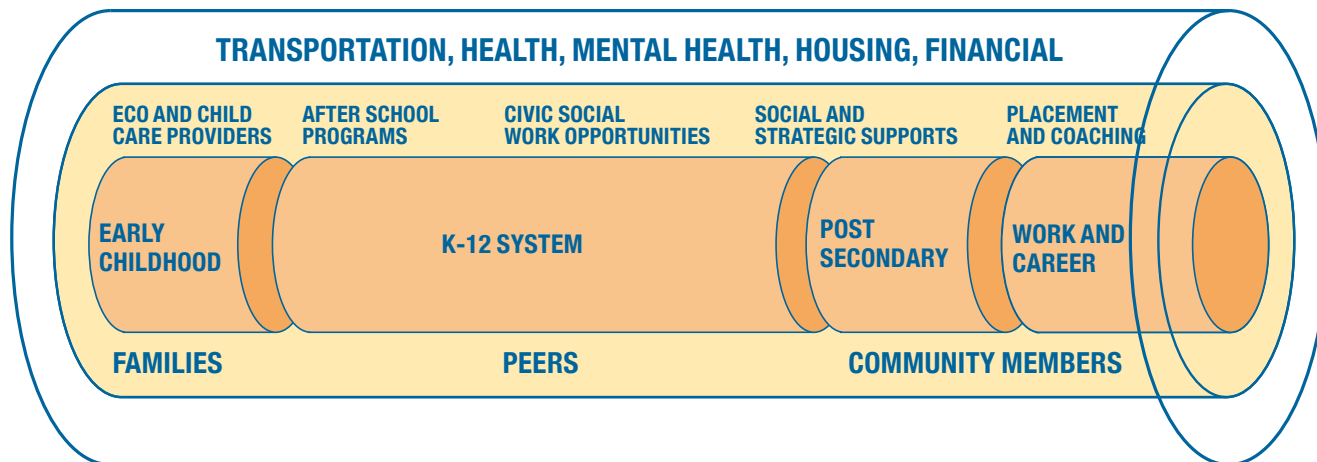


Figure 10
Ready by 21 Insulated Education Pipeline

The Ready by 21 theory of change specifically embraces many key elements identified in the Smarter Cities Challenge for Durham, including:

- Full view of the youth journey, from birth through school, work and career
- Fragmentation and duplication of programs and services
- Cross-community engagement to address all youth needs, both in school and beyond
- Focus on academic preparation, ability to manage risks, and social and emotional skills
- Full view of the Ready by 21 Youth pipeline is illustrated in Figure 10

More information is available from the Forum for Youth Investment at www.readyby21.org or 202-207-3333.





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1. The Minority Male Bridge to Success Project; Jim Johnson Jr, Mark McDaniel, Kenan-Flagler Business School,
2. Population figures according to 2010 census
3. *Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century*, Harvard Graduate School of Education, February 2011
4. *The Durham News*, February 19, 2012
5. *The News and Observer*, February 17, 2012
6. The Minority Male Bridge to Success Project; Jim Johnson Jr, Mark McDaniel, Kenan-Flagler Business School,
7. *Child and Youth Master Plan for Metropolitan Nashville and Davidson County: Task Force Report to Mayor Karl Dean*, July 2010
8. *Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century*, Harvard Graduate School of Education, February 2011
9. As per UNC Frank Hawkins Kenan Institute of Private Enterprise: "The Minority Male Bridge To Success Project, August 2011", A report by James H. Johnson Jr., Mark S. McDaniel.